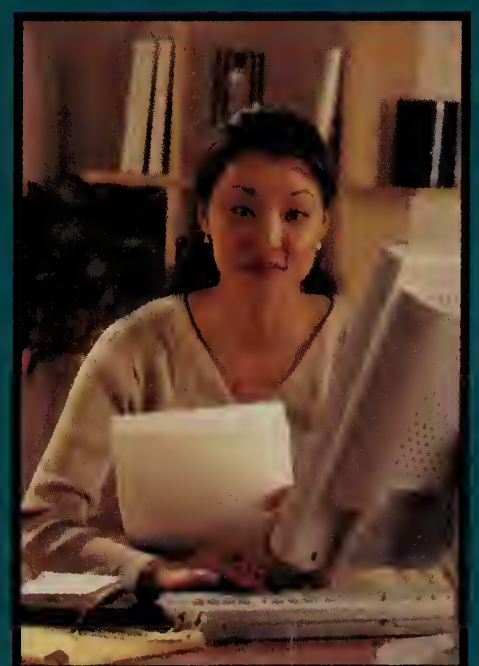
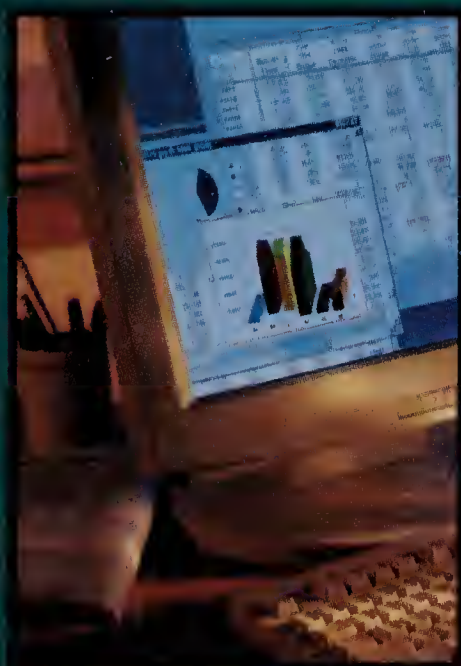
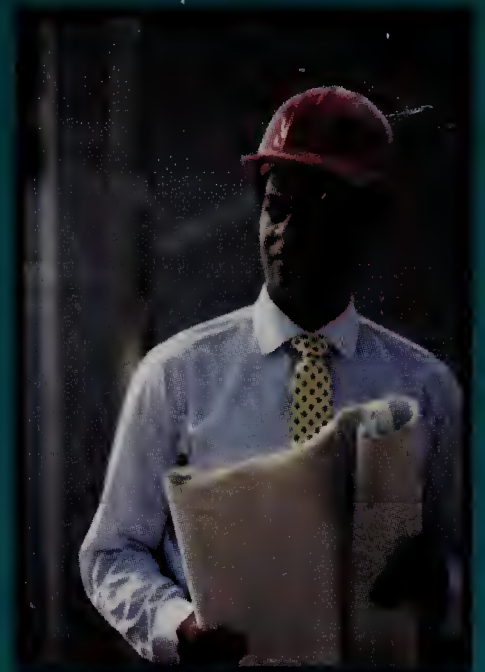




2001 - 2003 GASTON COLLEGE ACADEMIC CATALOG







2001 - 2003

ACADEMIC CATALOG



**Gaston College**  
Opportunities For Life



# **HOW TO USE THIS CATALOG**

## **Important Sections**

This catalog likely will be well used throughout your time here at Gaston College. You should skim through the entire book now, taking note of the main sections, then hold on to it for reference. You probably will find it beneficial to take a little more time in these sections:

- Calendar
- Admissions
- Cost
- Financial Aid
- Registration and Records
- Curriculum outline and course descriptions.

## **To Help You**

Also note these items, which are included for your convenience:

- Table of Contents
- Index
- Campus Map (back page).

## **Americans with Disabilities Act (ADA)**

The information in this catalog is available in alternative format upon request. Contact the Office of Marketing and Public Relations, 704-922-6215.

## **Schedule of Classes**

A schedule of classes is published each semester and is available approximately four weeks before the first day of registration. Schedules are available in the Admissions Office and at other campus locations. Please note that fees and programs can change at any time, so always check with your advisor before planning your schedule each semester.



# **GASTON COLLEGE**

## **ACADEMIC CATALOG FOR 2001 - 2003**

### **Addresses**

Gaston College  
201 Highway 321 South  
Dallas, North Carolina 28034-1499

Lincoln Campus of Gaston College  
P.O. Box 600/511 S. Aspen Street  
Lincolnton, North Carolina 28093

### **Phone Numbers**

#### **Dallas Campus:**

704-922-6200  
FAX 704-922-6440

#### **Lincolnton Campus:**

704-748-1040  
FAX 704-748-1074

### **Web Address**

[www.gaston.cc.nc.us](http://www.gaston.cc.nc.us)

### **Notification of Nondiscrimination**

Gaston College is committed to affirmative action and equal opportunity in employment and education and does not discriminate against current or potential employees or students on the basis of race, color, religion, sex, national origin, age, or disability. Inquiries concerning the college's affirmative action/equal opportunity policy should be directed to the President's Office, Gaston College.

### **Right to Change**

The Board of Trustees and/or Administration of Gaston College reserves the right to change at any time and without notice graduation requirements, fees and other charges, curriculums, course structure and content, and other such matters as may be within its control, notwithstanding any information set forth in this catalog. Gaston College reserves the right to cancel classes due to insufficient enrollment. Course offerings approved after publication of this catalog are described in class schedules, which are issued each semester.

### **Student Right to Know**

The average rate of persistence toward degree completion by students at Gaston College is available in the Student Records Office.

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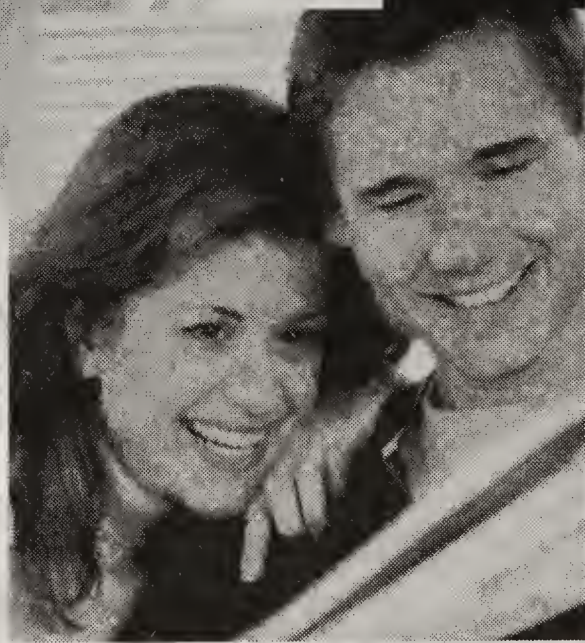






2001 - 2003

GENERAL INFORMATION





# 2001- 2003 ACADEMIC CALENDAR

## SUMMER SEMESTER 2001

Thursday, May 10	In-Person Registration - Dallas, Lincoln
Monday, May 28	First Day of Class, First Day of First Session
Friday, June 29	Last Day of First Session
Monday, July 2 - Friday, July 6	Faculty/Student Holiday
Wednesday, July 4	Holiday (College Closed)
Monday, July 9	First Day of Second Session
Thursday, August 2	In-Person Registration - Dallas, Lincoln
Friday, August 10	Last Day of Class, Graduation

## FALL SEMESTER 2001

Thursday, August 2	In-Person Registration - Dallas, Lincoln
Monday, August 20	First Day of Class
Monday, September 3	Holiday (College Closed)
Monday, October 8 - Tuesday, October 9	Faculty/Student Break
Wednesday, November 21	Faculty/Student Holiday
Thursday, November 22 - Friday, Nov. 23	Holiday (College Closed)
Thursday, December 6	In-Person Registration - Dallas, Lincoln
Monday, December 17	Last Day of Class

## SPRING SEMESTER 2002

Thursday, December 6	In-Person Registration - Dallas, Lincoln
Monday, January 7	First Day of Class
Monday, January 21	Holiday (College Closed)
Monday, February 18 - Tuesday, Feb. 19	Faculty/Student Break
Wednesday, March 27 - Tuesday, April 2	Faculty/Student Holiday
Friday, March 29 - Monday, April 1	Holiday (College Closed)
Thursday, May 2	In-Person Registration - Dallas, Lincoln
Wednesday, May 8*	Last Day of Class
Friday, May 10	Graduation

\* All classes that meet on Monday must meet on Wednesday, May 8

## SUMMER SEMESTER 2002

Thursday, May 2	In-Person Registration - Dallas, Lincoln
Monday, May 20	First Day of Class, First Day of First Session
Friday, June 21	Last Day of First Session
Monday, June 24	First Day of Second Session
Monday, July 1 - Friday, July 5	Faculty/Student Holiday
Thursday, July 4	Holiday (College Closed)
Thursday, July 25	In-Person Registration - Dallas, Lincoln
Friday, August 2	Last Day of Class, Graduation



# 2001- 2003 ACADEMIC CALENDAR

## FALL SEMESTER 2002

Thursday, July 25	In-Person Registration - Dallas, Lincoln
Monday, August 19	First Day of Class
Monday, September 2	Holiday (College Closed)
Monday, October 7 - Tuesday, October 8	Faculty/Student Break
Wednesday, November 27	Faculty/Student Holiday
Thursday, November 28 - Friday, Nov. 29	Holiday (College Closed)
Thursday, December 5	In-Person Registration - Dallas, Lincoln
Monday, December 16	Last Day of Class

## SPRING SEMESTER 2003

Thursday, December 5	In-Person Registration - Dallas, Lincoln
Monday, January 6	First Day of Class
Monday, January 20	Holiday (College Closed)
Monday, February 17 - Tuesday, February 18	Faculty/Student Break
Wednesday, March 19	Faculty/Student Break
Thursday, April 17 - Tuesday, April 22	Faculty/Student Holiday
Friday, April 18 - Monday, April 21	Holiday (College Closed)
Thursday, May 1	In-Person Registration - Dallas, Lincoln *
Wednesday, May 7*	Last Day of Class
Friday, May 9	Graduation

\* All classes that meet on Monday must meet on Wednesday, May 7

## **VISION STATEMENT**

Gaston College, a comprehensive center for learning, will be recognized for excellence in programs and services that address the changing educational needs of the community. The staff and faculty members will be integral to student success and will contribute significantly to the quality of life for the greater community.

## **MISSION STATEMENT**

Gaston College is a publicly supported, open door, comprehensive community college organized and chartered to be of service to the people of Gaston and Lincoln Counties and the state of North Carolina. The mission of Gaston College is to provide high quality educational programs and services to the citizens of Gaston and Lincoln Counties.

## **STRATEGIC GOALS**

To offer comprehensive education programs and services that contribute to the long term success of students and the growth of the communities the college serves.

To develop and implement an effective marketing plan that attracts students and engages the community to participate in and support the programs and services of the college.

To secure the financial, equipment, facility, and materials resources needed to support excellence in programs and services.

To foster a work environment that attracts and retains a committed, diverse, and highly competent workforce.

To be a center of influence and valued resource in the economic growth of the communities the college serves.



## ACTIVITIES IN SUPPORT OF THE MISSION

To accomplish its mission, the College:

Provides comprehensive Associate in Applied Science (A.A.S.) degree programs designed primarily to prepare students to enter the workforce.

Provides diploma and certificate programs consisting of a sequence of courses that frequently can be completed in one year or less by full-time students. These programs are intended for individuals seeking employment in a specific occupation.

Provides Associate in Arts (A.A.), Associate in Science (A.S.) and Associate in Fine Arts (A.F.A.) degree programs primarily designed to prepare students to transfer to a four-year college or university.

Provides developmental education to prepare students for entry into a degree, diploma, or certificate program.

Provides compensatory education, adult literacy, English as a Second Language, and high school diploma or equivalency for individuals seeking to improve basic skills, complete high school requirements, prepare for the workforce, or enter post-secondary education.

Provides continuing education programs for individual personal and professional development and for employee education and training to satisfy the skill development needs of business, industry, and public agencies.

Assures quality in all educational programs by measuring performance on a set of well-established criteria and by identifying and analyzing program needs.

Assures quality instruction by establishing effective, innovative, and professional teaching practices; by frequent evaluation of instructor effectiveness, and by updating methods, materials, equipment, and facilities.

Provides support services for all students, including specialized services for the disadvantaged, the handicapped, and other special needs groups, to enable student success.

Promotes positive relationships with public and private schools, colleges and universities, and with business and industry.

Provides services which support community economic, educational, and cultural efforts and which promote cooperative relationships with the community.

Promotes accessibility to educational programs through off-campus course offerings and through distance learning opportunities.

## **ABOUT THE COLLEGE**

Gaston College was granted a charter by the State of North Carolina in 1963 and began its first classes in temporary headquarters in September 1964. The college moved to its permanent campus on Highway 321 between Dallas and Gastonia two months later. Serving both Gaston and Lincoln counties, Gaston College enrolls over 5,000 students each term in curriculum programs and averages over 16,000 students annually in its Continuing Education programs. Part of the North Carolina Community College System, Gaston College is accredited by the Southern Association of Colleges and Schools to award associate degrees.

## **FACILITIES**

The twelve major buildings that comprise the Gaston College campus contain approximately 380,000 square feet and have an estimated current value of \$26,500,000. There is an efficient road system and parking for more than 2,000 cars. College facilities (including a 480-seat auditorium) are available for public use and may be scheduled through the Office of Community Education.

### **Lincoln Campus**

The Lincoln Center of Gaston College was opened in August 1969. In 1987, it was relocated to the Lincoln County School of Technology at 1 Timken Drive in Lincolnton. The former Lincolnton High School of 511 S. Aspen Street, was renovated by Gaston College, to become the current Lincoln Campus location. Classes were first held at Lincoln Campus, in spring semester 1999.

### **Beam Art Gallery**

The Dewey F. and Prue K. Beam Center for Visual Arts on the main campus of Gaston College displays the paintings, drawings, and sculpture of local and regional professional artists and students. Shows typically change each month. For gallery hours and information, call 704-922-6343 or 704-922-6200.

### **Rauch Gallery**

The Jeanne Girard Rauch Gallery is located in the Rauch Science and Fine Arts Building . The building and gallery is named for Senator Marshall and Mrs. Jeanne Rauch. The gallery has approximately 1,100 square feet of floor and 200 linear square feet of wall space. The exhibition space includes a commons gallery with marble floors at the main entrance of the building that looks like a large, enclosed gallery with light oak floors and off-white painted walls. The ceiling height is twelve feet to thirty feet with indirect natural light and excellent state of the art track lighting. The main gallery space overlooks and opens into an outdoor plaza at the rear of the building.

Also The Morris Library offers art exhibition space on the first and second floor of the building.



## **Regional Emergency Services Training Center**

The Regional Emergency Services Training Center is a five-story training facility used by fire, police, and emergency medical service organizations. On the surrounding grounds, there are nine propane and flammable liquid pits. The center gives Gaston College the opportunity to offer specialized training previously unavailable in our region.

## **Morris Library and Media Center**

The Morris Library and Media Center opened in winter 1997. The 35,000 square foot building houses both library and media services.

The library maintains open stacks on the first and second floors. The collection includes over 45,000 books; 240 periodicals; 3,300 pieces of audiovisual materials; 36,000 microforms; computer software; and CD-ROMs. Faculty/staff recommendations, librarians' selections, and user input create a collection focused on the information needs of the college community.

The library services are available to students, faculty, staff, and the community. Library cards are issued at the Circulation Desk.

Assistance with reference and research is available during all hours of operation at the Reference Desk. Librarians are available to assist library users with locating, evaluating, and using information from a variety of sources, including print, CD-ROMs, and the Internet. The electronic catalog, CLC, provides access to the collections of 40 community colleges.

College archives are stored in Special Collections. Library staff members are available to assist with user needs in this area.

Materials are cataloged and processed through Technical Services.

## **Media Services**

Media production is located on the second floor of the Morris Library.

The distance learning classroom provides interactive video on the North Carolina Information Highway (NCIH). Media staff also create and edit educational and informational videos. Satellite teleconferencing provides interactive teleconference reception.

Services in audiovisual production involve producing and duplicating audiovisual aids for the classroom. Still photography is a part of this service.



## **GASTON COLLEGE ADMINISTRATION**

Dr. Patricia Skinner, President

Dr. Don Ammons, Vice President for Academic Affairs

Dr. Carrietta Adkins, Vice President for Student Services

Mr. Richard Miller, Vice President for Finance and Operations

## **GASTON COLLEGE BOARD OF TRUSTEES**

Officers:

Mr. Alan Albright

Mr. George Ball

Mr. Hugh Bryant

Mr. Joe D. Carpenter

Mr. Jerry W. Cochrane

Mr. J. A. Dalpiaz

Ms. Joyce Houser

Ms. Sarah Knowles

Ms. Rhonda McLean

Ms. Johnnie Moore

Mr. David A. Robinson

Mr. Randy Vinson

Mr. Don L. Warren

Student Government Association President

## **GASTON COLLEGE FOUNDATION, INC. BOARD OF DIRECTORS**

Mr. J. A. Dalpiaz, President

Mr. Alan Albright

Mr. Jerry Cochrane

Mrs. Barbara Myers Cozart

Mr. Tom D. Efird

Mrs. Sarah Knowles

Mr. Larry Petty

Mr. Richard Earl Thomas

Mr. Robert Tull

## ACCREDITATIONS AND MEMBERSHIPS

Gaston College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS 1866 Southern Lane, Decatur, Georgia 30033-4097, (404) 679-4501) to award associate degrees.

Four engineering technology curricula are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc. ABET is recognized by the National Commission of Accrediting as the appropriate accrediting agency for the accreditation of engineering technology curricula. The nursing programs are approved by the North Carolina Board of Nursing. The medical assisting program is accredited by the Committee on Allied Health Education and Accreditation. The North Carolina Office of Emergency Medical Services approves the Emergency Medical Science courses.

The following organizations are among those in which the college holds institutional memberships:

Air Conditioning Contractors of America  
Accreditation Board for Engineering and Technology, Inc.  
TAC of ABET  
111 Market Place, Suite 1050  
Baltimore, MD 21202  
Telephone (410) 347-7700  
American Association of Collegiate Registrars and Admissions Officers  
American Association of Community Colleges  
American Library Association  
American Society for Engineering Education  
Association of College Administration Professionals  
Association of Community College Business Officers  
Association of Community College Trustees  
Charlotte Area Educational Consortium  
College Stores Association of North Carolina  
Cooperative Education Association, Inc.  
Gaston County Chamber of Commerce  
National Association of College Auxiliary Services  
National Association of College Stores  
National Association of College and University Business Officers  
National Association for Foreign Student Affairs  
National Council on Black American Affairs/AACC  
National Council for Marketing and Public Relations  
National League for Nursing  
North Carolina Association of Colleges and Universities  
North Carolina Association of Community College Presidents  
North Carolina Association of Community College Trustees  
North Carolina Citizens for Business and Industry  
North Carolina Cooperative Education Association  
North Carolina Council of Practical Nurse Educators  
Piedmont Area Educational Consortium  
Southern Association of College and University Business Officers  
Southern Association of Colleges and Schools  
Southern Association of Community, Junior and Technical Colleges









2001 - 2003

ADMISSIONS





# **GENERAL ADMISSION REQUIREMENTS**

## **(for Curriculum Programs)**

Gaston College subscribes to the open door admission policy. High school graduation or the equivalent is required of all applicants for degree programs. Applicants must be 18 years of age and possess a high school diploma or equivalent, unless they are dual enrollment students. Although restrictive standards for admission are not imposed, admission to the college does not guarantee immediate admission to the degree program desired by the applicant. Admission to certain programs may be affected by special program requirements.

### **Associate Degree / Diploma / Certificate Programs**

For all programs, the following steps must be completed before students are admitted.

1. Submit to the Admissions Office a completed Application for Admission.
2. Request that your high school mail an official high school transcript to the Office of Admissions at Gaston College, 201 Highway 321 S., Dallas, NC 28034-1499. The documentation listed below can be submitted in the place of a traditional high school transcript:
  - Official Adult High School transcript
  - Official copies of GED scores
  - Official transcript from International Correspondence School
  - Official transcript from Home School
3. Request that all colleges previously attended submit official transcripts.
4. Schedule and take the ASSET Test. The ASSET Test may not be required of any person who has scored 520 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT. A transfer student who has earned a "C" in both college level math and English from a regionally accredited institution shall have the test waived.

Applicants are encouraged to apply early to ensure completion of admission files prior to enrollment. Applicants may enroll on a provisional basis until all admission requirements are met, such as receipt of transcripts and test scores. However, all admission requirements must be met before a student can begin a second semester of enrollment.

### **Transferring from Another College**

Applicants transferring to Gaston College must submit an Application for Admission and meet all requirements for general admission.

### **Selective Programs**

Admission to the general college does not guarantee admission to selective programs. Please follow the guidelines established by the program departments in addition to the general admission requirements. Applicants are accepted in a pending status, for certain selective programs, until accepted in the program.

## **Special Student Admission (Non-degree Applicants)**

Students who wish to register for credit courses, as Special Studies Students, may earn a maximum of 15 hours before declaring a major curriculum and may be admitted to credit classes with an advisor's approval. Tuition and fees are the same as for regular curriculum students. Credits earned under Special Studies status may be applied to a degree, diploma or certificate program by making a formal request of curriculum status change to the Director of Student Records. Such a request must be made on or before completion of 15 credit hours and the student must meet the regular admissions requirements for the curriculum as stated previously. Applicants who are unable to complete their admission files, may present their case to the Director of Admissions to request that a temporary exception be made. (The Director of Admissions will grant temporary exceptions on a case-by-case basis).

## **Re-Admission**

Students who have not registered since the North Carolina Community College System converted to the semester system may be required to re-apply and meet current admissions requirements.

## **Non-Graduates**

Non-graduates from high school may apply for certain certificate and diploma programs in the Trade and Industrial Division. They must take the college's placement test. Non-graduates interested in other classes may register for only two classes as special non-degree seeking students. Certain classes may be restricted.

## **Students With Disabilities**

Students with disabilities must meet all admission requirements. In order to receive services under the Americans with Disabilities Act, the student is responsible for supplying documentation to the Counseling Center well in advance of class registration. Documentation may include but is not limited to a medical, psychological, or educational diagnosis and/or an Individualized Education/ Transitional Plan. Students should also schedule a meeting with a counselor in the Counseling and Career Development Center to discuss individual needs regarding reasonable accommodations.

## **International Students**

International students must meet all admission requirements listed under General Admission Requirements. All applicants must submit (along with an application) an official or certified copy of their high school transcript and an official/certified copy of any college work completed. If the original copies of these transcripts are in a language other than English, an official English translation is required. The translation should be by a certified translator. Students whose foreign transcripts can not be evaluated by college personnel are responsible for providing a transcript evaluation from a recognized American transcript evaluation agency. Proof of English proficiency is required. This may be established by making a minimum score of 540 (207 on the computer) on the Test of English as a Foreign Language (TOEFL). The TOEFL is published and administered in most countries by the Educational Testing Service, P O Box 899, Princeton, New Jersey, 08541, USA. Applicants must present evidence of adequate financial resources for F-1 visa status. Form I-134 (Affidavit of Support) is used in most instances. However, Gaston College's Financial Certificate will be presented to each applicant for completion. All F-1 students must carry a full course of study and pay out-of-state tuition rates.



There are no scholarships or other types of financial aid available for students from abroad. An F-1 student may accept off-campus employment only if the Immigration and Naturalization Service has granted prior approval.

Gaston College is a commuter institution and does not have dormitories or housing for rent. Students must find their own housing in the neighboring towns. Transportation to the college must be arranged by the student.

The International Student Advisor (ISA) assists international students with personal problems, adjustment to customs and procedures of American higher education, visas, government regulations, and academic advisement. The International Student Advisor is the student's chief contact. The student is responsible for reporting to the ISA as soon as he or she arrives and must report to this advisor for the duration of his or her stay.

**ALL APPLICANTS SHOULD HAVE COMPLETED THESE REQUIREMENTS AT LEAST SIX WEEKS PRIOR TO THE SEMESTER FOR WHICH THEY ARE SEEKING ADMISSION.**

Resident aliens, permanent residents, naturalized citizens, and applicants with other visa status must present these documents when applying.

## **Dual Enrollment Program**

Upon the approval of their high school principal, high school juniors and seniors may be admitted as special dual enrollment students to appropriate credit and/or non-credit courses. Dual enrollment students must be at least 16 years of age and have completed 10th-grade English. Applicants are admitted on a space available basis into regular classes at the college.

Applicants must be taking at least two courses at the high school and be making progress toward graduation. In the case of courses offered in the summer, the principal must certify that a student took at least two high school courses during the preceding semester and made appropriate progress toward graduation.

All dual enrollment students are required to take the ASSET test to determine eligibility to enroll in a college credit course. The ASSET test evaluates skills in English, reading, and math. Dual enrollment students who have scored 520 on the verbal section and 520 on the math section of the SAT, or who have a composite score of 22 on the ACT shall waive the ASSET test. All course prerequisites apply to dual enrollment students.

Students must obtain a Dual Enrollment Form from their counselor and complete a Gaston College Application for Admission. The Dual Enrollment Form must be completed and all appropriate high school signatures must be obtained before registration. Required Gaston College signatures can be obtained at the time of registration.

## **Residency**

Gaston College is supported by the taxpayers of North Carolina and Gaston and Lincoln counties. Students who are not state residents pay out-of-state tuition. A student's official residency status is determined at the time of registration according to the residency policy of the state of North Carolina, the North Carolina Community College System, and the Gaston College Board of Trustees. In order for a student to be considered a legal resident for tuition purposes, the applicant's residency must be established and maintained in North Carolina for at least twelve months preceding the date of first enrollment in an institution of higher education in this state.

The legal residence of a person under 18 years of age is that of his or her parents, surviving parent, or legal guardian. In cases where parents are divorced or legally separated, the minor's domicile is deemed to be North Carolina for the time period that either parent, as a North Carolina legal resident, claims the minor as a tax dependent.

A change of address does not automatically entitle a student to pay the same instructional fees as a North Carolina resident. A request to change one's residency status must be submitted to the Admissions Office prior to registration. More information on residency requirements may be obtained from the Admissions Office.

## **Change of Address**

Change of address should be submitted in writing to the Registrar's Office to ensure receipt of grades and general information.

## **Admission Requirements for Continuing Education Programs**

The application and registration process for continuing education (non-credit) programs is completed at the first class meeting. Some classes may require pre-payment or pre-registration to assure a place in class. A special form is used for continuing education students. Refer to brochures and marketing information for details.

Continuing education courses do not require an application for admission to the general college.

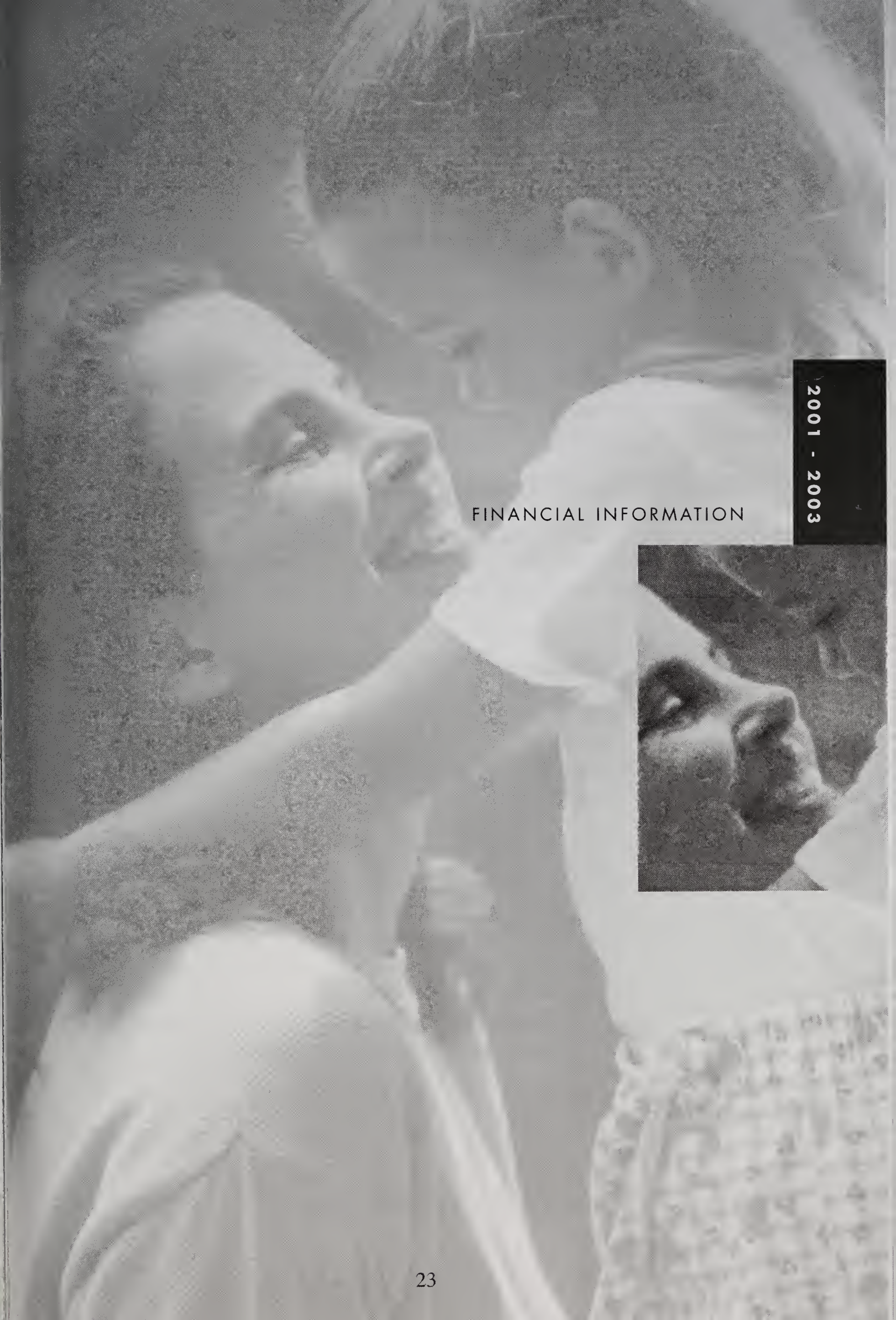
North Carolina residents 65 or older do not pay registration or other fees, except for self-supporting classes.

The same age restrictions for curriculum (credit) students apply to continuing education students and dual enrollment students.









2001 - 2003

## FINANCIAL INFORMATION





**COST TO ATTEND GASTON COLLEGE**

Gaston College, supported by the taxpayers of North Carolina and Gaston and Lincoln counties, maintains modest instructional and general fees that are subject to change by action of the state of North Carolina and the Board of Trustees of Gaston College.

**Curriculum Courses**

**Instructional Fee Per Semester Hour of Credit**

North Carolina Residents	Out-of-State Residents
\$27.50	\$169.75

The maximum instructional fee for residents of North Carolina is \$385.00 per semester for 14 or more credit hours. The maximum instructional fee for out-of-state residents is \$2,282 per semester for 14 or more credit hours. During the summer term, the maximum charge is for 9 hours or more, not 14.

**Continuing Education Courses**

There is a sliding scale for state-support occupational extension courses ranging from \$50 for up to ten instructional hours to \$65 for 101 hours and above. Practical skills and special interest courses vary in cost. Continuing Education students pay no activity fee; however the current usage fee applies for classes that meet on campus five or more times.

Continuing education students pay no activity fee; however, the current usage (parking) fee may apply.

**Exceptions**

Dual enrollment students pay no tuition, except for continuing education classes. However, they do pay all other fees.

North Carolina residents 65 or older do not pay registration or other fees, except for self-supporting continuing education classes.

**Other General Fees**

**Student Activity Fee**

\$.75 per semester hour of credit

The maximum semester student activity fee is \$4 for 8 or more credit hours for in-state and out- of-state residents. A Student Activity Fee is not charged for the summer term.

Some courses may require an additional supply fee. Courses requiring additional fees will be identified in the class schedule.

**Usage Fee** \$6.00 per semester (\$4 during summer term)

**Graduation Fee** \$15

**Lab Fee**

\$3 per lab hour

The maximum lab fee is \$30 per semester for in-state and out-of-state residents. The maximum lab fee is \$27 for summer term.

**Malpractice Insurance** Approximately \$22 or \$40 per year depending on courses. Individuals enrolled in nursing and health services programs are required to pay an annual malpractice premium.

**American College Test**

The current cost is \$20.50 for those students required to take the American College Test for guidance purposes, and it is payable at the time the test is taken.

**Returned Checks**

A fee of \$20 will be assessed to any student whose check is returned.

**Right to Change Fees**

All college fees are subject to change without notice.

**Refunds****Curriculum Programs**

If a student withdraws from a class or classes before the 10% date, a 75% tuition refund will be given for the class(es) dropped. Students must apply for the refund by marking the appropriate box on the withdrawal form. No refunds will be given after the 10% date. If a course fails to materialize, refunds are automatically processed.

(The refund policy is subject to change. Refunds of tuition will be issued in accordance with the current state and college policy.) Refund checks will be mailed within six weeks of the last drop-add day.

**Continuing Education Courses**

If a student officially withdraws from a class prior to the first class meeting, a full refund will be given. A 75% refund will be given if student officially withdraws before the 10% point of the class. A full refund is given for classes cancelled by the college because of insufficient enrollments. Fees for self-supporting courses will not be refunded unless the college cancels the course, or in the case of documented extenuating circumstances.



## **Accident Insurance**

Gaston College does not have insurance to cover students if they are injured on the Gaston College campus or in a college-related activity. It is advisable, therefore, that students, especially those in areas that could be considered to be potentially hazardous, make certain they have appropriate coverage under a personal accident policy or that of a parent.

For those who find they do not have accident insurance coverage, information on a student insurance program is available from the Business Office in the Administration Building.



**Gaston College**  
Opportunities for Life

# **FINANCIAL AID**

## **General Information**

Financial assistance is available for curriculum students in the form of scholarships, grants, loans, and work programs. Every effort is made by the institution to help students who need assistance. Financial aid is intended to supplement, not replace, financial contributions from the student and his or her family.

There are three types of financial aid: gift assistance, student loans, and work. Gift assistance includes grants and scholarships that do not have to be repaid. Loans and work are self-help programs. Loans are usually paid back after enrollment is terminated. Work enables students to pay part of their expenses through their own earnings.

## **How Eligibility is Determined**

Gaston College uses the Free Application for Federal Student Aid (FAFSA) to assess the financial condition of financial aid applicants. Information entered onto the FAFSA is analyzed according to the requirements of the U.S. Congress and federal guidelines. This ensures that all applicants are treated fairly and equitably. Such items as income, assets, family size, marital status, and number of family members in the household in college are used to determine eligibility.

Results of the FAFSA indicate the amount the student and his or her family can contribute toward the student's education. Most financial aid is based on need rather than on scholastic record. Financial need is the difference between the total education expenses and what the family is expected to contribute.

## **How to Apply for Financial Aid**

Students who are entering Gaston College and are in need of financial aid are requested to follow this application procedure:

1. After the application for admission has been submitted (see Admissions), the student should contact the Financial Aid Office. Instructions for applying will be mailed to the applicant. Whenever possible, the student should request the application in person. It is to the student's advantage to apply as early as possible for financial assistance.
2. The student who wishes to apply for financial assistance must file a Free Application for Federal Student Aid (FAFSA) and must apply for a Federal Pell Grant. The student must complete and submit the Gaston College Financial Aid Application. The FAFSA is available at local high schools, the Lincoln Center, and the Financial Aid Office on the main campus.
3. The student applying should report for a personal interview when designated.
4. After determination of scholarship, loan, grant, or work-study award, the recipient will be notified by letter.



Applicants may apply for a scholarship, grant, loan, work-study, or any combination of these. The total combined sum of these must not exceed total financial need. The awarding of aid is based on funds available.

In the event that a student receiving aid withdraws from the institution, the student will be responsible for repayment of a prorated amount of any portion of payments that were extended to the student for living expenses and that would no longer be attributed to meeting expenses related to attendance.

The student has the obligation to maintain the "Satisfactory Academic Progress Requirements" as defined specifically for financial aid recipients. Failure to maintain academic progress will result in the loss of eligibility for financial aid. Eligibility may be regained. Student coursework must be restricted to the major that is on file in the Registrar's Office. Courses taken outside of the approved major may require adjustment to the financial aid award. Students are responsible for payment of repeated courses which were previously paid for by financial aid.

## **FEDERALLY SUPPORTED PROGRAMS**

### **Eligibility**

Students must meet the following requirements before they can receive federal financial aid funds:

1. have financial need, except for some loan programs;
2. have a high school diploma, a General Education Development (GED) certificate, or a passing mark on an independently administered test approved by the U.S. Department of Education or meet other standards that are approved by the U.S. Department of Education;
3. be enrolled as a regular student working toward a degree, diploma, or approved certificate in an eligible program. (Students may not receive aid for correspondence or telecommunications courses unless they are part of an associate, bachelor, or graduate degree program.);
4. be a U.S. citizen or eligible noncitizen;
5. have a valid Social Security Number;
6. make satisfactory academic progress;
7. sign a statement of educational purpose/certification statement on refunds and default (found on the Student Aid Report);
8. sign a statement of undated information, if required (found on the Student Aid Report); and
9. register with the Selective Services, if required.

### **Federal Pell Grant**

The Federal Pell Grant program is designed to provide financial assistance to those who need it. The amount of the Federal Pell Grant is determined on the basis of the student's and his or her family's financial resources and the expected family contribution.

The Federal Pell Grant Award is a grant and, unlike a loan, does not have to be repaid. Every student who is applying for financial aid at Gaston College must apply for the Federal Pell Grant. Applications may be obtained at area high schools or from the Financial Aid Office.

### **Federal Supplemental Educational Opportunity Grant (FSEOG)**

This program of direct grants of financial aid is for students of exceptional financial need who without the grants would be unable to continue their education.

### **Federal Stafford Loan (William D. Ford Federal Direct Loan Program)**

This program enables the student to borrow directly from the federal government with service provided by the Gaston College Office of Financial Aid. The educational loan is guaranteed by the federal government.

To apply for the federal loan, a student must submit a Free Application for Federal Student Aid (FAFSA) for the assessment of his or her financial condition. An authorized credit check is processed on site using the Southeastern Credit Bureau, Inc. software application and the "BEACON" rating system. No interest is charged while the student is in school or for six months after he or she leaves school. Payments begin six months after the student graduates or leaves school.

Applications are available in the Financial Aid Office and other campus locations.

### **Federal College Work-Study Program (Federal/Institutional)**

Gaston College participates in the college work-study program, which provides on campus work opportunities for students needing financial assistance to attend school. Work is available in the library, faculty offices, administrative offices, laboratories, shops, and building and ground maintenance. Students working under this program are paid monthly for the work performed. In arranging a job and determining how many hours a week a student may work under this program, the Financial Aid Office will take into account the student's (1) need for financial assistance, (2) class schedule, (3) health, and (4) academic progress.

## **STATE-SUPPORTED PROGRAMS**

**North Carolina Student Incentive Grant** Legal residents of North Carolina who are enrolled full time and maintain satisfactory academic progress may apply for the North Carolina Student Incentive Grant (NCSIG). Students must demonstrate "substantial financial need."

The NCSIG program is administered in North Carolina by the Free Application for Federal Student Aid. Details of the application process are available from high school



guidance counselors and from the Financial Aid Office. Application deadline is March 15 each year for the following academic year.

### **North Carolina Student Loan Program for Health, Science, and Mathematics**

This program was formerly known as the North Carolina Medical Student Loan Program, and it is operated as a Special Program Department of the North Carolina State Education Assistance Authority. To be eligible for the loan, students must be legal residents of North Carolina who are enrolled full time in degree programs oriented toward careers in health, mathematics, or science. Students may apply for this loan through the N.C. Education Assistance Authority. Students may attend a North Carolina post-secondary institution or eligible out-of-state institution. Award recipients are chosen according to major, academic capabilities, and financial need. Further information is available from the Financial Aid Office.

### **Nurse Education Scholarship Loan (NESLP)**

The N.C. General Assembly created this program in 1989 in an attempt to alleviate a nursing shortage.

Recipients must be enrolled in the LPN or the RN program, be North Carolina residents, and demonstrate financial need. The repayment of the loan may be forgiven by working as a nurse in North Carolina. Scholarship recommendations are made by the Office of Financial Aid.

### **Wachovia Technical Scholarship**

This fund was established through a gift from the Wachovia Bank and Trust Company to the NC Community College System.

To qualify as a candidate for this scholarship, a person must be full-time student enrolled in the second year of a two-year technical program, must demonstrate financial need and scholastic promise, and must use the scholarship to pay for books, tuition, and transportation. The recipient is selected by the Financial Aid Committee.

### **North Carolina Community College Grant**

The North Carolina Community College Grant is a need-based grant established by the NC Legislature to provide funds to help meet the educational costs of NC residents attending community colleges. Legal residents of North Carolina who are enrolled at least half-time (6 credit hours) in an eligible program and maintain satisfactory academic progress may apply. Students must demonstrate financial need. Students with a bachelor's degree are ineligible.

The North Carolina Community College Grant program is administered in North Carolina by the Free Application for Federal Student Aid (FAFSA). Details of the application process are available from the Financial Aid Office.

## **LOCALLY SUPPORTED PROGRAMS**

Gaston College currently offers several locally supported scholarships. The sources of these scholarships (clubs, individuals, businesses, foundations, etc.) determine what criteria are to be used in awarding them.

### **GASTON COLLEGE FOUNDATION SCHOLARSHIPS**

The Gaston College Foundation, Inc. offers a variety of scholarships for Gaston College students. Donors of these scholarships help determine what criteria are to be used in awarding them. Call the Foundation at 704-922-6511 for a complete list of individual scholarship criteria. Applicants are considered for all scholarships for which they qualify. Applicants must satisfy all Gaston College admissions requirements including any required placement tests for their program of study. Completed applications must be received by March 31.

Gaston College Foundation scholarships are as follows:

Hershal Hoyle and Gilda R. Beam Endowed Scholarship  
Pearl Dixon Balthis Foundation Scholarship  
Dr. Borden Bell Endowed Scholarship  
Eloise Bell Endowed Scholarship  
Virginia Brandon Endowed Scholarship  
The John and Joyce Brison Endowed Scholarship  
David Belk Cannon Family Scholarship  
Dr. Helen L. Carter Memorial (Pilot Club) Scholarship  
Ray P. Craig/Gaston County Dyeing Endowed Scholarship  
Dallas Optimist Club Scholarship  
First Gaston Foundation Liberal Arts Endowed Scholarship  
David L. Friday Jr. Memorial Scholarship  
John Reeves Gamble, M.D., Scholarship  
Gaston County Art Guild Scholarship  
Gaston County Credit Professionals International Scholarship  
Gastonia East Rotary Club Scholarship  
Oneda Sellers Harbin Endowed Scholarship  
Andy Hawkins Memorial Drafting Award  
Mickey Joel Helms Scholarship  
J. Mack Holland Scholarship  
Fred and Creloa Houser Endowed Scholarship



Bonnie Hoyle Memorial Endowed Scholarship  
Hunter Huss Endowed Scholarship  
Ruth and Harry Huss Endowed Scholarship  
T. Jeffers Endowed Scholarship  
Dr. Janet Johnston Honorary Scholarship  
William Thomas Love Endowed Scholarship  
PSNC Energy Scholarship for Non-Traditional Students  
Jeanne Rauch Art Scholarship  
Fred A. Ratchford, Sr. Endowed Scholarship  
Pearl Davidson Rhodes Scholarship  
Jack Robinson Endowed Scholarship  
Pauline Scruggs Memorial (Altrusa Club) Scholarship  
William B. and Elizabeth C. Seabrook Endowed Scholarship  
Bill Sharpe Memorial Scholarship  
Warren and Rebecca Shiver Scholarship Fund  
Stabilus Endowed Scholarship  
Special Endowed Scholarship  
Susan Stanley Art Fund  
Stanley Total Living Center Nursing Scholarship  
Evelyn Rankin Stowe Endowed Nursing Scholarship  
Robert E. Tull Endowed Nursing Scholarship  
James E. and Mildred W. Waggoner Scholarship  
Don Walser Family Endowed Accounting Scholarship  
The Mother Bernice Wilson Endowed Nursing Scholarship

## **VETERANS INFORMATION**

Students may be eligible for educational benefits from the Department of Veterans Affairs (DVA) while attending Gaston College. Gaston College has been approved as an institution qualified and equipped to provide education in the arts and sciences and in the career program areas under the provisions of chapters 30, 31, 32, 35, or 1606 of Title 38 of the U.S. Code.

Veterans in degree programs must show evidence of high school completion to be eligible for DVA certification and benefits. Veterans without a high school diploma who wish to enter degree programs on a probationary status must first satisfy the probationary requirements and obtain the approval of the State Approving Agency before they can be certified for the DVA educational benefits. Veterans entering the GED program must provide the college with their latest high school transcript.

A grade of "S" is sometimes awarded in Developmental Education courses may be awarded to veterans or to veterans' dependents receiving DVA educational benefits.

Records of progress are kept by this institution on veteran and non-veteran students alike. Progress records are furnished to students at the end of each scheduled school term.

Veterans will accept the responsibility for overpayment made to them due to their failure to follow school and/or Department of Veterans Affairs regulations. Any changes in the placement of a student must be justified in writing by a Gaston College counselor, department chair, or instructor. This justification will be included in the student's academic records.

## **VOCATIONAL REHABILITATION**

The state of North Carolina provides financial assistance for residents who have permanent handicaps. Information concerning such aid is available through the Director of Vocational Rehabilitation, NC Department of Public Instruction, Raleigh, North Carolina 27611.







2001 - 2003

## EDUCATIONAL PROGRAMS



# COLLEGE TRANSFER PROGRAMS

## (Associate in Arts, Associate in Science, and Associate in Fine Arts)

The college transfer curriculum includes a wide range of course offerings in liberal arts and sciences for all students at the college. Some students take only a few courses each semester, but they may enroll in a two-year sequence and earn the Associate in Arts or Associate in Science degree.

Students can plan their program in order to transfer to four-year colleges and universities. The students enroll in what is usually referred to as the transfer curriculum, which offers courses that parallel those offered during the first two years at four-year institutions. Credits earned in this curriculum may be transferred to colleges and universities as the first and second year of a baccalaureate degree program. Students who intend to transfer their credits should plan their courses with a Gaston College counselor and/or advisor to be certain they will meet the current requirements at four-year colleges and universities. Students who have not decided upon a major but intend to transfer their credits toward a four-year degree should also meet with a counselor from the four-year school.

Students who select the Associate in Arts (A10100) degree at Gaston College transfer to senior colleges to pursue such majors as the following:

Anthropology	French	Psychology
Art	History	Social Work
Business Administration	Music	Sociology
Education	Pre-Law	Spanish
English	Pre-Ministry	

Students who select the Associate in Science (A10400) degree at Gaston College transfer to senior colleges to pursue such majors as the following:

Agriculture	Pharmacy	Science-Biology,
Architecture	Physical Therapy	Chemistry, & Physics
Business Administration	Pre-Dentistry	Options
Education	Pre-Medicine	Textile-Chemistry
Engineering	Pre-Optometry	or Textile
Forestry Mathematics	Pre-Veterinary Medicine	Technology
Nursing		

Students who select the Associate in Fine Arts (A10200) degree at Gaston College transfer to senior colleges to pursue such majors as the following:

Animation	Digital Design	Jewelry Design
Architecture	Environmental Design	Metalsmithing
Art Education	Fashion Design	Museum Management
Art History	Fiber Crafts	Painting
Arts Management	Filmmaking	Photography
Ceramics	Fine Arts	Printmaking
Commercial Art	Graphic Design	Product Design
Communications Arts	Illustration	Sculpture
Computer Graphics	Interior Design	Textile Design

**Each student should confer with a counselor or advisor about course selection prior to registration. Only with approval of the appropriate dean may students substitute courses for those specifically required for graduation and courses outside the area of specialization. Students are responsible for the proper completion of their academic programs based upon the requirements stated in the Gaston College Catalog in conjunction with the current schedule.**

Counselors or advisors will provide assistance to students concerning transfer to other institutions. Transfer of credits from one institution to another is subject to change. Therefore, it is the responsibility of the transferring students to research their prospective senior institution. Students may contact the counseling department of Gaston College or the admissions office at the college to which they plan to transfer for information and guidance on transfer of credits. **Although faculty members, staff members, counselors, advisors, and administrators are available to help students with planning, the responsibility rests upon the individual student.**



## **ASSOCIATE IN APPLIED SCIENCE DEGREES**

The Associate in Applied Science (A.A.S.) degrees are two-year terminal programs that prepare the student for the workforce. However, there are some senior institutions where all or part of these degrees are accepted as the first two years of a four-year program. A few of the senior institutions that accept some of Gaston College A.A.S. degrees are the following:

Appalachian State University	Pfeiffer College
Belmont Abbey College	University of NC at Charlotte
Gardner-Webb University	Western Carolina University
Mars Hill College	Winston-Salem State University

Some senior institutions will evaluate the Associate of Applied Science Degree on a course-by-course basis.

The minimum requirements for the Associate in Applied Science Degree vary with the degree program. The completion of no fewer than thirty (30) semester hours while in attendance at Gaston College is required.

A student is eligible to graduate with an Associate in Applied Science Degree upon completion of the curriculum requirements for the particular program listed in this catalog. A student must have a 2.00 grade point average on courses presented for graduation.

### **Associate in Applied Science degrees are offered in the following programs:**

- Accounting - A25100
- Architectural Technology - A40100
- Automotive Systems - A60160
- Biomedical Equipment Technology (A50100)
- Business Administration - A25120
- Business Administration--Electronic Commerce - A25120
- Business Administration--Human Resources Management - A2512C
- Business Administration--International Business - A12512D
- Business Administration--Logistics Management - A2512E
- Civil Engineering - A40140
- Computer Programming - A25130
- Criminal Justice - A55180
- Dietetic Technician\* - A10300DT
- Early Childhood - A55220
- Electronics Engineering - A40200
- Emergency Medical Science - A10300EM
- Emergency Med. Science Bridging Program - A10300EM
- Fire Protection - A55240
- Healthcare Management Technology - A25200
- Industrial Engineering - A40240
- Industrial Management - A50260
- Information Systems - A25260
- LPN-ADN Track - A10300LR
- Machining Technology - A50300
- Mechanical Drafting - A50340
- Mechanical Engineering - A40320
- Medical Assisting - A10300MA
- Medical Office Administration - A25310
- Nursing (Associate Degree) - A10300AN
- Office Systems Technology - A25360
- Office Systems Technology (Legal) - A2536A
- Paralegal - A25380
- Therapeutic Massage - A10300TM
- Veterinary Medical Technology - A10300VT

## **DIPLOMAS**

A student is eligible to graduate with a diploma upon completion of the curriculum requirements for the particular program listed in this catalog. A student must have a 2.00 grade point average on courses presented for graduation.

- AC/Heating & Refrigeration- D35100
- Automotive Systems - D60160
- Civil Engineering Technology - D40140
- Early Childhood - D55220
- Electrical/Electronics Technology - D35220
- Electronics Engineering - D40200
- Industrial Engineering Technology - D40240
- Industrial Maintenance - D50240
- Industrial Management Technology - D50260
- Machining Technology- D50300
- Mechanical Drafting - D50340
- Mechanical Engineering - D40320
- Medical Transcription - D25320
- Office Systems Technology - D25360
- PN (Practical Nursing) - A10300PN
- Welding Technology - D50420

## **CERTIFICATES**

A minimum of 75 percent of the requirements for the certificate must be completed at Gaston College. A student must have a 2.00 grade point average on courses presented for graduation.

- AC/Heating & Refrigeration Cooling - C35100
- AC/Heating & Refrigeration Heat Pump - C35100
- AC/Heating & Refrigeration Heating - C35100
- Accounting Certificate in Federal Income Tax - C25100
- Administration (Early Childhood) - C55220B
- Architectural (CAD Certification) - C40100
- Automotive Engines & Power Trains - C60160
- Automotive Fuel & Electrical Systems - C60160
- Basic Computer Skills - C25260
- Basic Law Enforcement Training - C55120
- Child Development Associate Preparation - C55220
- Civil Engineering - C40140
- Computerized Accounting Certificate - C25100
- Early Childhood - C55220C
- Electronics Engineering Technology - C40200
- Emergency Medical Technician (Intermediate)\*- C45340
- Healthcare Management Technology - C25200
- Industrial Engineering - C40240
- Industrial Maintenance Mechanics - C50240
- Industrial Management - C50260
- Infant-Toddler (Early Childhood) - C55220A
- Machining (Basic Machine Tool) - C50300
- Machining (CNC Certificate) - C50300
- Mechanical Drafting (CAD Certificate) - C40320
- Mechanical Engineering Technology - C40320
- Medical Office (Basic) - C25310
- Medical Office (Intermediate) - C25310
- Nursing Assistant - C45480
- Phlebotomy\* - C45600
- Production Technology - C40240
- Quality Engineering - C40240
- School-Age (Early Childhood) - C55220D
- Special Needs (Early Childhood) - C55220E
- Welding - C50420



## **CONTINUING EDUCATION PROGRAMS**

As a non-credit arm of the college, Continuing Education has the flexibility to offer short-term courses, broad-based programs, and various services to the citizens of Gaston and Lincoln counties.

Visit the Gaston College website ([www.gaston.cc.nc.us](http://www.gaston.cc.nc.us)) for Continuing Education information and current schedules.

### **Community Education Programs**

Community Education Programs include a wide variety of courses for the general public. Examples of these courses include language, investment, traffic school, painting, horseback riding, dancing, arts and crafts, computer applications, real estate, and specialized professional certification and license renewal.

### **Corporate Education**

The Professional Development Institute encompasses a broad range of programs designed for the training and education needs of managers and professionals. The institute offers certification and review courses for various professions and include Certified Purchasing Managers and APICS.

### **Focused Industrial Training**

Focused Industrial Training classes are designed for specific groups of workers who need to update their skills because of technological changes. This program is supported by a NC state grant that provides classes on a cost-share basis.

### **New and Expanding Industry**

The New and Expanding Industry Program encourages businesses to create more jobs by providing funding for specialized training courses. These courses are offered free of charge to qualifying industries and range from basic employee relations to highly sophisticated production skills.

### **Occupational Extension**

Occupational Extension courses teach occupational skills and provide licenses and certification. Courses include office skills, computer training, quality control, manufacturing techniques, and workplace Spanish for business uses. Courses may be offered on campus or at community locations.

### **Small Business Center**

The Small Business Center is a specially funded program that provides no-fee consulting and seminars for entrepreneurs. The Gaston College Center is one of 58 small business centers comprising the N.C. Community College Small Business Center Network. The Small Business Center provides assistance in business planning, marketing, accounting, personnel, financing, and management concerns relating to small business.

### **Criminal Justice Academy**

The Criminal Justice Academy serves area law enforcement agencies by offering a wide range of law enforcement extension courses. Among these are Officer Survival, Defensive Tactics, Baton Training, Legal Updates, Bike Patrol, Pepper Spray, Chemical Immobilization, Animal Cruelty, Command Spanish, and Accident Investigations. Other various in-service training courses offered are Firearms and Driver Training. Some in-service training courses are offered upon demand. Programs that offer certification from the North Carolina Criminal Justice Standards Division are Radar Certification and Intoxilyzer Certification. Courses are offered on campus and at various off-campus locations throughout Gaston and Lincoln counties.

### **The Computer Training Institute**

The Computer Training Institute provides customized courses on a wide variety of software applications for business, such as Internet training and Microsoft Office applications. These courses may be conducted at places of business or on campus. Classes leading to certification as an A+ certified Technician, Microsoft Certified Systems Engineer (MCSE), and Certified Internet Webmaster (CIW), are also provided. Over seventy internet-based computer and special interest classes are also available.

### **Emergency Medical Services**

The Emergency Medical Services Program serves local emergency medical agencies in emergency training for initial certification and recertification of both basic and advanced life support courses. Training is offered in cooperation with the State of North Carolina Office of Emergency Medical Services and leads to state certification. In some instances, training may lead to national certification. Additional courses are offered (both on-campus and off-campus) to meet the needs of EMS agencies in Gaston and Lincoln counties. Current available programs include EMT-Basic, EMT-Intermediate, EMT-Paramedic, EMT-Defibrillator, Medical Responder, Medical Desponder Bridge to EMT Basic, EMT-Recertification, In-house EMS Education, EMS Methodology, CPR for Health Provider, Advanced Cardiac Life Support, Pediatric Advanced Life Support, Pre-hospital Trauma Life Support, Basic Trauma Life Support Survival, Sign Language, Spanish for EMS, Tanning Facility Operator, and other related courses needed by EMS and First Responders on demand. The American Heart Association Community Training Center for Gaston and Lincoln counties offers basic life support community and professional cardiopulmonary resuscitation (CPR) courses, first aid and AED training.

### **Regional Emergency Services Training Center**

The Regional Emergency Services Training Center (RESTC) provides basic, continuing, and advanced training in all areas of emergency services — fire, rescue, law enforcement, and emergency medical services. The primary intent of the RESTC is to improve the training and level of expertise within emergency services across the state of North Carolina.

The facility began operation in January 1991 and is located on 15 acres within the southern portion of the Gaston College campus. The RESTC includes a five-story, 21,000 square foot burn structure, which is the largest of its type in the United States.



The burn structure houses a pitched-roof ventilation training area, industrial simulation areas, interior combustible liquid area, five-story vertical confined space shaft, and 1,800 square foot simulated smoke maze. In addition to the burn structure, there are also 12 flammable liquid/liquid petroleum gas pits, confined space areas, hazardous materials areas, and a training pavilion with fitness center.

### **Fire and Rescue Training**

Gaston College leads the state in the delivery of Fire and Rescue Training. This program assists local municipal and volunteer fire departments and rescue squads in the overall training of firefighter and rescue personnel. Certification training is delivered in cooperation with the NC Fire and Rescue Commission and the National Fire Academy, utilizing standards of the National Fire Protection Association. Current available programs that offer North Carolina certification are Firefighter-Levels I & II, Basic Rescue Technician, Advanced Rescue Technician, and Emergency Driver/Operator & Pumps. Courses are offered on-campus, at the Regional Emergency Services Training Center, and at various off-campus locations throughout Gaston and Lincoln counties.

### **Industrial Emergency Response Team and Fire Brigade Training**

Gaston College leads the state in the delivery of Industrial Fire Brigade Training. This program provides training for local, regional, and national industry through the delivery of customized programs of training addressing the specific needs of each customer. These programs include on-site visits, consultations, and specialized courses in the areas of confined space, hazardous materials, basic and advanced fire suppression techniques, and rescue operations.

### **Continuing Education Unit (CEU)**

Copies of CEU guidelines are available in each program office as well as in the Dean's office. These guidelines assure that a qualifying class will have established objectives and content and that a course will have standards of satisfactory performance, which will be announced at the first class meeting. Transcripts for Continuing Education courses are provided through the office of the Coordinator of Continuing Education Registration upon written request.

## **THE LIFE SKILLS DEPARTMENT**

The Life Skills Department includes several programs designed to raise the literacy level in Gaston and Lincoln counties. All Life Skills programs are open to adults age eighteen or older. Students should contact the Life Skills office and set up an appointment to learn about the various program options. At that time, a student will be able to complete the enrollment process and begin most of our programs immediately.

Students between the ages of sixteen and eighteen can be admitted if they can demonstrate a special need. Students who are under eighteen years of age must have a parent or guardian complete a special needs form. It must be taken to a notary public for an official seal before the form is returned to the college. If the student has not been out of school for at least six months, this waiting period can only be waived by the approval of the superintendent or designee of the student's public school system. If a student's last school was not in North Carolina, there is a six-month waiting period.

Life Skills programs include the following:

### **Human Resource Development**

The Human Resource Development Program prepares the participants for the workplace. It is designed to help participants develop positive attitudes and self-concepts as well as upgrade the level of education needed to prepare for, obtain, and maintain employment. For additional information, please call the HRD Coordinator at 704-922-6318.

### **Adult Basic Education Program/General Education Development (ABE/GED)**

The ABE component provides basic skills education for adults with less than an eighth grade education. The ABE curriculum focuses on the development of skills required for employability, including reading, writing, speaking, computation, and critical thinking.

The Life Skills department maintains ABE/GED learning labs at the Dallas Campus and the Lincoln Campus, as well as at other sites throughout Gaston and Lincoln counties. For additional information please call 704-922-6461.

### **GED Testing**

GED provides testing designed to measure academic skills in reading, writing, mathematics, science, and social studies. GED is open to adults age eighteen or older. Persons who pass the GED test battery receive a high school equivalency diploma. For additional information about preparing for the GED, call 704-922-6322. Call the GED Testing Office at 704-922-6321 or 704-922-6316 to schedule a GED test.



**Adult High School (AHS)**

AHS offers high school courses developed at the local level for adults age eighteen or older. Program participants are awarded a high school diploma based on successful completion of the necessary coursework and the North Carolina Competency Test. For additional information, please call 704-922-6461.

**English as A Second Language (ESL)**

ESL provides instruction for individuals with limited English proficiency. ESL stresses development of basic language skills and preparation for daily life, employment, and citizenship.

Gaston College offers ESL classes that teach written and conversational English to immigrants preparing them for citizenship and life in the community. For additional information, please call 704-922-6461.

**Compensatory Education (CED)**

CED provides instruction to help mentally handicapped adults develop skills and abilities necessary to obtain employment and achieve self-sufficiency. Courses are offered in the areas of community living skills, consumer education, health, language, math, social science, and vocational education. For additional information, please call 704-922-6461.

## DEVELOPMENTAL EDUCATION

The Developmental Education Program provides students with the opportunity to build academic skills and acquire the background that should facilitate success in their desired curriculum program. Applicants to degree, diploma, and certificate programs are required to participate in the ASSET assessment program, which provides placement information for reading, English, and math. Once the assessment scores are determined, students are counseled about the courses needed in order to reach their academic and career goals. Students placing into developmental courses may concurrently register for certain courses within their desired curriculum.

Developmental courses include basic college preparatory courses in reading, writing, and mathematics. In addition, the program offers a study skills class, which teaches strategies for successful learning.

### Developmental Education Courses

			Class	Lab	Credit
ENG	080	Writing Foundations	3	2	4
ENG	090	Composition Strategies	3	0	3
ENG	090A	Essential Reading Strategies	0	2	1
RED	070	Essential Reading Skills	3	2	4
RED	090	Improved College Reading	3	2	4
MAT	060	Essential Mathematics	3	2	4
MAT	070	Introductory Algebra	3	2	4
MAT	080	Intermediate Algebra	3	2	4
ACA	118	College Study Skills	1	2	2

## GASTON COLLEGE LEARNING CENTER

The Gaston College Learning Center, established in 1996, is designed to provide students with opportunities for academic and personal growth. The center is committed to the philosophy that given adequate services, support, and time, and appropriate teaching strategies, all students can successfully accomplish their academic goals, whether that goal includes transfer to a four-year institution or the successful completion of a single course.

GCLC services are available to a diverse constituency. The program places primary emphasis on serving the needs of students "at risk" in the college environment. These students traditionally include those who are economically and educationally disadvantaged, disabled, or under-prepared and students who are members of non-traditional or minority groups. However, services are not limited to these groups. The GCLC actively provides support to all students experiencing difficulty in achieving their potential. Additionally, faculty members may use the academic support services to supplement their classroom instruction by referring students to the GCLC. This service to the faculty also includes consultation on students' needs, supplementary educational materials, and additional academic support services.



The program has one specific function in providing support for students of Gaston College. This function is to provide academic support services to the general student population. Services for the general student population include the following:

1. GCLC Peer-Tutoring Services: This program provides tutorial services in selected general education courses for all students by appointment. The program is staffed by tutors who have completed 12 credit hours or more (not including developmental classes). All tutors undergo initial training and meet regularly for planning, evaluation, and skills development. Tutoring services are available not only for students having difficulty in passing a course, but also for students wanting to improve a grade from "B" to "A."

2. Learning Skills courses: The learning skills courses taught through the GCLC are designed to acquaint students with the motivation and the methods to learn and be successful in the academic setting. Emphasis is placed on skills and techniques for note-taking, test-taking, and test and supplemental book use, as well as for organization and research methods necessary for writing papers and for making oral presentations. Three or four sections of this course are offered each semester. Any student taking two or more developmental classes is required to take this course.

3. Help for under-prepared students: Under-prepared students who arrive at Gaston College need special assistance during their first few semesters on campus and beyond. Through the GCLC, these under-prepared students are provided with support, special attention, and academic tutoring. They have special advisors among the developmental education faculty and staff. They are provided with the resources necessary to assist them in becoming successful, independent learners. They are provided with learning skills classes to equip them with the skills necessary for them to be mainstreamed into the college.

4. Academic probation: Students who find themselves on academic probation need specialized advising and support. The GCLC provides support to faculty members who advise students on academic probation. Special contracts are provided, along with weekly meetings and the support necessary to help the students raise their GPA and enable them to remain in college. Peer tutoring is required for all students on academic probation to provide them with the study skills and strategies necessary to become successful students. Counseling will be provided for those students who have special problems that contribute to their academic probation.

## **PEER TUTORING PROGRAM**

The Gaston College Peer Tutoring Program is a part of the larger academic support service called the Gaston College Learning Center. Tutorial services are offered in core curriculum courses on both an appointment and a walk-in basis. The program is staffed by paid and volunteer tutors who have A's in the courses they tutor, and who are recommended by their instructor and the chair of the department in which the course is taught. Tutors are carefully interviewed by the Learning Center Coordinator and undergo an initial training period. They also meet regularly with other tutors and staff members for planning, evaluation, and skills development. Careful records are maintained on all tutoring sessions. In addition to being knowledgeable and well-trained, tutors are also chosen for their sensitivity toward students and for their interest in teaching. Students who are not satisfied with their understanding or performance in a course may use this free service. Help is available in the area of understanding concepts, problem-solving, and study skills. Tutoring services are available not only for the student who is having difficulty in passing a course, but also for those students who want to improve a passing grade.

Peer tutoring services offer several options for students to increase understanding of course content and to improve performance.

**Tutoring is available in the following core courses: Most math and English classes, as well as basic computer, accounting, science, and psychology classes. Volunteer tutoring is available in other core courses. If a tutor is not available for a particular course, the tutor coordinator will make every effort to obtain one if the demand is sufficient. General tutoring is available in the Dalpiaz Student Success Center from 7:30 a.m. to 9:00 p.m. Monday through Thursday and 7:30 a.m. to 2:00 p.m. on Friday. Help is available on an appointment or walk-in basis.**



## **DISTANCE EDUCATION**

Distance education at Gaston College expands learning opportunities by using non-traditional delivery methods to meet the growing scheduling needs of students throughout Gaston and Lincoln counties. The current technologies available include two-way interactive video, Internet courses, satellite broadcasts, cable television broadcasts, and College-by-Cassette.

### **North Carolina Information Highway**

Through the North Carolina Information Highway, Gaston College can receive courses or teleconferences from other institutions using two-way interactive television in classrooms. Participants at the receiving sites interact with the presenters and participants at the originating sites. The Dallas Campus also delivers two-way interactive classes and presentations to the Lincoln Campus of Gaston College and to other institutions.

### **College-by-Cassette**

College-by-Cassette is videotaped lessons provided to each student on a set of video cassettes at the beginning of the semester. Students participate in on-campus orientations and scheduled meetings, purchase textbooks and study guides, complete tests and assignments, and communicate with the instructor. Video tapes are available in the Morris Library.

### **Internet-Based Courses**

A wide-range of Internet-based courses is available through the curriculum (credit) or continuing education (non-credit) programs. These courses are designed for students with some Internet background. Students must have access to a computer linked to the Internet. Students may also use the Internet-accessible computers in the Morris Library to take the courses. For curriculum course information contact the Director of Distance Education at 704-922-6515 or for continuing education (non-credit) course information contact the Coordinator of the Computer Training Institute at 704-922-6521.

### **Weekend Professional Program**

The Weekend Professional Program consists of Friday evening and Saturday classes designed to accommodate working adults who are committed to completing the associate degree program in Business Administration. Financial aid and student support services are available. Participants in this program can earn their degree in less than three years.

# COOPERATIVE EDUCATION

Cooperative Education (co-op) is an academic program that integrates classroom study with practical experience in industry, business, and public agencies. The work experience constitutes a regular and essential element in the educational process by allowing students to apply their studies in a real work environment.

The co-op work experience is concurrent or alternates with academic studies. It is a paid work experience, and students receive academic credit toward degree or diploma requirements. Students work from one to three semesters in either part-time or full-time jobs with employers selected and/or approved by the college. Students are contacted and evaluated periodically by a faculty coordinator and receive on-the-job supervision by the employers.

## Eligibility

Students may be accepted from various programs of study at Gaston College provided they meet the following general criteria:

1. Be enrolled in an approved co-op curriculum.
2. Have a minimum 2.00 GPA (this minimum may be higher, depending on degree or diploma).
3. Have successfully completed specific courses pre-selected by the faculty.
4. Be recommended by the co-op faculty coordinator.
5. Be approved by the Cooperative Education Office.

(Note: Enrollment in the co-op program does not guarantee placement for every student.)

## Application Procedure

Interested students must obtain a Cooperative Education application form from the Office of Cooperative Education, a copy of their college transcript from the Office of Student Records, and they must schedule an interview with the cooperative education program director.

## Presently Employed Students

Students may qualify to receive academic credit if they are already employed in an area directly related to their academic major. The following general criteria will be used to determine eligibility:

1. The student must be acquiring new skills or knowledge related to their academic major and/or



2. The student must be developing a recently-learned skill or applying recently-learned knowledge related to their academic major and/or
3. the student must be receiving increased levels of responsibility related to their academic major and
4. the employer agrees to assist with an evaluation of the student's progress and to permit on-the-job visits by co-op staff member.

Students who are interested in Cooperative Education should contact the Office of Cooperative Education to obtain additional information about the program. NOTE: Co-op options are listed within each participating curriculum course outline.

## **STUDENT EMPLOYMENT SERVICES**

Student Employment Services assists students and graduates who are seeking employment by making them aware of the range of career opportunities available, helping them present themselves effectively as candidates, and aiding them in finding part-time, full-time, temporary, or summer employment.

Some of the specific services and activities offered are Career Day; employer campus visits; resume writing information/workshops; interview techniques information/workshops; and posting of part-time, full-time, and temporary job openings on the bulletin board outside the Myers Center cafeteria and in the Student Employment Office.

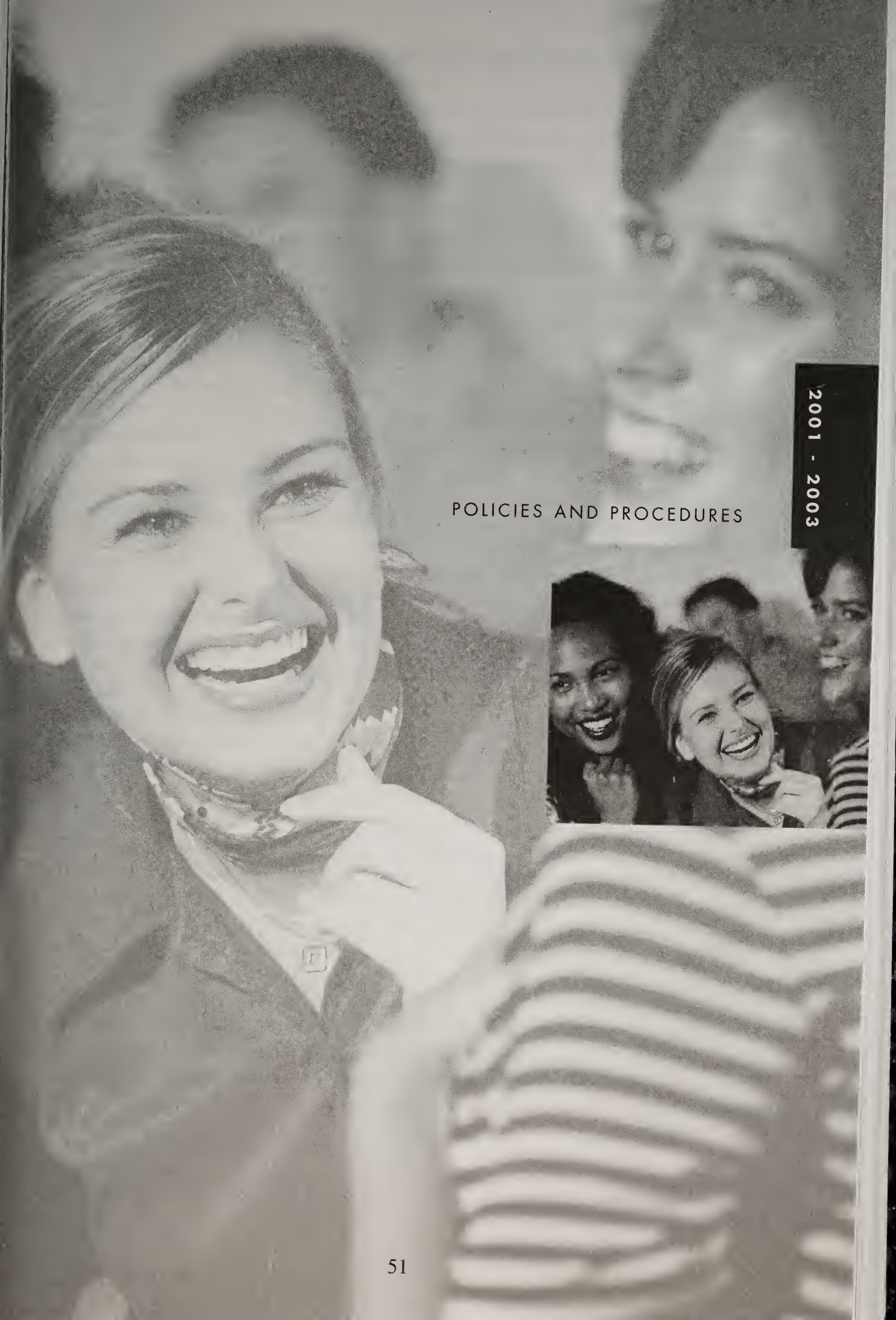
## **THE UNIVERSITY CENTER AT GASTON COLLEGE**

The University Center at Gaston College was established in 1990 through the efforts of Appalachian State University, The University of North Carolina at Charlotte, and Gaston College. The University Center brings courses leading to undergraduate or graduate level degrees to the Gaston College campus in order to make classes more accessible to the citizens of Gaston and Lincoln counties.

Various institutions of higher learning throughout North Carolina participate with the Center to help meet the growing need for upper division and graduate education opportunities for evening students. Gardner-Webb University presently offers undergraduate courses leading to a business administration or criminal justice degree, and North Carolina Agricultural and Technical State University offers courses leading to a master of science in adult education. UNC Charlotte offers a bachelor of science in engineering technology and a master of education in special education.

All undergraduate and graduate level classes offered as a part of The University Center on the Gaston College campus appear in the college's schedule of classes published each semester. For additional information please call 704- 922-6482.





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## POLICIES AND PROCEDURES



# **STUDENT RESPONSIBILITY**

Gaston College has established a set of regulations, policies, and standards in order to provide an academic environment that will promote quality education and assure compliance with state, federal, accreditation, and certification directives and statutes.

Students are responsible for the proper completion of their academic programs based upon the requirements stated in the Gaston College Catalog in conjunction with the current schedule. Faculty members, staff members, counselors, and administrators are available to help students with planning, but the responsibility of fulfilling all requirements rests upon the student.

## **Class Attendance**

College instruction is designed for class attendance. The responsibility for class attendance is placed specifically on the student. At the beginning of each course it is the responsibility of each instructor to notify students in writing of the course attendance requirements.

A student who fails to maintain attendance requirements may be dismissed from a given class upon recommendation of the instructor.

The student is responsible for all material covered in each course for which he or she is registered. In no instance does absence from class relieve the student of the responsibility for the performance of any part of the course work. The student is further responsible for initiating any request to make up work because of class absence. The decision to assist the student with makeup work, including tests, in every case rests with the instructor. The instructor may require verification of medical and personal circumstances presented by the student to influence this decision. Course work not made up may affect a student's grade in the final evaluation, since the instructor is not required to offer the student an opportunity to make up course work.

A student may seek reinstatement into class by submitting a written request to the instructor. If the request is denied, the student can petition for reinstatement directly to the vice president for academic affairs, who will make a final ruling upon the petition. If the request is approved, a reinstatement form must be completed and submitted to the Office of the Registrar.

## **Standard of Honesty**

Dishonesty, cheating, plagiarism, and knowingly furnishing false information to the college are regarded as serious offenses. It is expected that cases of dishonesty will first be considered at the department faculty level; then the matter will follow procedures in accordance with the Code of Student Conduct.

## THE OFFICE OF THE REGISTRAR

The Office of the Registrar directs registration each semester for credit classes. This office provides transcripts (official and student copies), and verification and certification of enrollment status. The office also mails final grade reports, processes grade changes, orders and issues diplomas, and processes name and address changes.

Specific registration information is contained in the college's class schedule.

### **Family Rights and Privacy Act - Release of Student Information**

Gaston College has a long-standing commitment to the protection of students' rights and privacy of information. Gaston College complies with the provisions of the Federal Family Educational Rights and Privacy Act, State of North Carolina Law, and the State Department of Education Division of Community Colleges rules. These federal and state requirements relate to accessibility and confidentiality of student records. Gaston College Procedures, Release of Student Information, provides pertinent and detailed information concerning classification of student records and access and release provisions. This procedure is available to students, faculty members, administrators, and staff members in the Office of the Vice President for Student Services and it is also published in the Student Handbook.

Students have the right to inspect their educational records and correct such records if warranted. Students are protected from release of information without written consent. All student records are open for inspection and reviewed by the student unless he or she waives this right. The parent(s) of a dependent student as defined in Title 26 U.S.C.S.s 152 Internal Revenue Code, also has this right to inspect records that are maintained by the college on behalf of the student.

There are three categories of records: (1) Directory Information Records, (2) Limited Access Records, and (3) Sole Possession Records.

(1) Directory Information Records, which may be made public, include a student's name, address, telephone number, date of birth, major field of study, dates of attendance, and degrees received. This information will only be released by the Office of the Vice President for Student Services or a designee after the requester has demonstrated a legitimate need to have such information. Any student not wishing the release of directory information must complete a statement in the Student Records Office no later than the last day of drop/add. Otherwise, directory information may be disclosed for legitimate purposes by the college.

(2) Limited Access Records pertain to the permanent academic records of the student, disciplinary records, financial information, and testing data. The college will not release information in Limited Access Records without the written permission of the student.



(3) Sole Possession Records pertain to records of instructional, supervisory, and administrative personnel that remain in the sole possession of the maker and are not accessible or revealed to any other person.

### **Change of Address**

A request for a change of address must be submitted in writing to the Registrar's Office. Change of Address forms are available in the Registrar's Office.

### **Student Right to Know**

The average rate of persistence toward degree completion of students at Gaston College is available in the Registrar's Office.

### **Student Classification**

Evening: A student who is enrolled for a majority of course work scheduled after 4:30 p.m. Day: A student who is enrolled for a majority of course work scheduled before 4:30 p.m.

Full Time: A student who is enrolled for twelve or more semester hours.

Part Time: A student who is enrolled for fewer than twelve semester hours.

### **Change of Program**

Students may change their program by completing a major change form. These forms are available in the Registrar's Office and in the Counseling Center. Once the major change has been processed, a new academic advisor will be assigned. Students should meet with their academic advisor to determine how their course work will apply to their new program.

## **REGISTRATION FOR CURRICULUM COURSES**

### **How To Register**

Before a student may register he or she must have an application on file in the Admissions Office. Students are responsible for registering each semester on the designated registration days. Early registration by telephone is held approximately the ninth week of the semester. Prior to the start of the semester, open registration is held for all students - current, new, and returning. The drop/add period (late registration) is the first three days of class. The actual dates are published in *Register* each semester. Once a student's schedule has been entered into the computer, he or she can drop/add during any of the three registration periods (early, regular, or late).

It is the responsibility of the student to ensure that all course and graduation requirements are met. A student will not receive credit for any course for which registration has not been completed. Students attending class for which they are not officially registered will receive neither a grade nor hour credits for the course.

A student who finds it necessary to drop/add must secure a form from the Office of the Registrar. The form must be signed by the student's advisor and returned to the Office of the Registrar for final processing.

The privilege of registering may be withheld by the college for the following reasons: unpaid fees, overdue loans, overdue library books, or incomplete admission records. Exceptions may be made by the chief student services officer.

Note: Continuing Education Registration is handled through the various program areas. No Gaston College applicant form is required, although many courses require a reservation form with payment in advance.

### **Auditing a Course**

Auditing a course means that a student attends classes, but may not be required to submit assignments or take examinations. An auditor, therefore, receives neither a grade nor course credit. The auditing fee, however, is the same as it would be if the student had enrolled for credit. The decision to audit cannot be reversed.

Students should register for the course to be audited during the registration period, then complete an audit form, obtain the signature of the instructor and submit it to the Office of the Registrar. Audit status may be declared through the eleventh week of class.

### **Withdrawal**

It is the student's responsibility to withdraw from class. Withdrawal from a course for academic reasons must be initiated by a student prior to the eleventh week of the semester. The student must complete an official withdrawal form available from the Office of the Registrar.

After the eleventh week of class, withdrawals are granted for the following reasons:

Medical - for reasons of accidents or illness

Administrative - for unusual or unavoidable circumstances

After the eleventh week, withdrawal requires the approval of both the instructor and division dean.

(NOTE: A student who stops attending classes for any reason should not expect the instructor to drop him or her. It is the student's responsibility to withdraw officially by completing a withdrawal form in the Office of the Registrar by the deadline date published in the class schedule. Failure to do so could result in an F grade).

## **CREDIT HOURS AND COURSE LOADS**

**Full-time and Part-time Status** A student must take at least 12 semester hours during fall and spring terms and 9 semester hours during the summer to be considered a full-time student. Although the normal course load for a full-time student is 16 semester hours, a counselor or advisor may recommend a heavier or lighter load depending on ability and/or past performance.



## **Course Overload**

No student may carry in excess of 18 semester hours without the written permission of the appropriate division dean.

## **GETTING CREDITS WITHOUT TAKING THE COURSE**

### **Credit by Examination**

A student may petition the course instructor and department chair for permission to seek course credit by examination. If both grant permission, the department chair, upon the student's successful completion of the examination, will notify the division dean and the registrar of this outcome. Credit by examination is not permitted for courses numbered lower than 100. No student may request credit by examination for more than eighteen credit hours. The student must be registered and have paid for the course for which the examination is requested.

Students who are on any type of financial aid should confer with the Office of Financial Aid before attempting credit by exam.

Emergency Medical Science students are exempt from the College's policy on maximum CE credits. Because of the nature of this program, many students will exceed the maximum of eighteen CEs allowed by the college policy.

To have credit entered in the student's record in a given semester, the examination must be completed during the first 10 days of the semester, and the registrar must be notified in writing of the successful completion by the end of the third week of class.

The grade of "CE" will be earned as a result of successful completion of the examination. The student may take the examination only once. Credits by examination will be applied toward graduation requirements. Quality points are not computed for the grade "CE."

## **ADVANCED PLACEMENT**

A student may be granted advanced placement credit by achieving the appropriate score on The College Board Advanced Placement Examination. The results of the Advanced Placement Examinations should be sent to the Gaston College Registrar's Office by the Advanced Placement Program. Students may request their transcripts from the Advanced Placement Program by sending a letter or calling the AP Program. The address, FAX and phone number are listed below:

Advanced Placement Program  
PO Box 6671  
Princeton, NJ 08541-6671  
Telephone (609) 771-7300  
Fax (609) 530-0482

## **TRANSFERRING TO GASTON COLLEGE FROM ANOTHER COLLEGE**

Students are eligible to transfer to Gaston College from accredited colleges and universities.

Gaston College accepts transfer credits from institutions of higher education that are accredited by the Southern Association of Colleges and Schools and other regional agencies recognized by the Council on Postsecondary Accreditation as described in the current edition of Transfer of Credit Practices of Designated Educational Institutions published by the American Association of Collegiate Registrars and Admissions Officers. Transcripts from accredited institutions (as described above) will be evaluated in the Office of the Registrar. All courses completed with a "C" or better that have a Gaston College equivalent will be accepted. Once a transfer evaluation has been completed, a copy of the evaluation will be mailed to the student. The student should meet with his or her academic advisor to determine how the coursework will apply toward the student's intended degree.

## **TRANSFERRING TO ANOTHER COLLEGE FROM GASTON COLLEGE**

Counselors and other members of the college staff will advise and assist any student planning to transfer to a four-year institution. However, it is the student's responsibility to follow the admission requirements closely. These requirements are indicated in the particular institution's catalog. Reference copies of various catalogs are available in the campus library and counseling offices.

Because of the highly specialized nature of courses in particular programs, some courses are not designed for transfer to a four-year institution. Students also should note that courses with numbers 100 or lower usually do not transfer.

Students are strongly advised to see a counselor regularly if they are planning to transfer to a four-year college or university. Representatives from four-year colleges often visit the campus to help Gaston College students plan their transfer programs.

## **TAKING CLASSES AT OTHER CHARLOTTE-AREA COLLEGES**

Gaston College is a member of the Charlotte Area Educational Consortium, which includes 24 other area colleges and universities. A cross-registration program provided by the consortium allows Gaston College students to take certain courses at other colleges if not available at Gaston. Information on cross-registration is available in the Office of the Registrar.



# TRANSCRIPTS OF GRADES

Official and student copies of Gaston College transcripts should be requested in writing from the Office of the Registrar. Transcripts will only be sent upon the written request of the student. No transcript will be furnished for a student or graduate who has a financial obligation to the college. It is against Gaston College policy to fax transcripts.

Gaston College does not issue transcripts of other colleges and schools. Any student needing a transcript from a college they previously attended, must contact that institution.

## HOW THE GRADING SYSTEM WORKS

### Grade System and Quality Points

A final grade is the instructor's evaluation of the student's work and achievement throughout a course. Grades are given at the discretion of the instructor.

Once a grade has been submitted, it will not be changed, except in the event of a clerical error or as a result of the appeal process. A student who has a question about a grade should consult the instructor. A student who believes a grade to be unfair may appeal to the instructor, followed by the department chair and divisional dean, if necessary. The division dean's approval is required for all grade changes.

Factors upon which the final grade may be based are attendance, recitation, written and oral quizzes, reports, papers, final examination, and other class activities. At the beginning of each course, it is the responsibility of the instructor to notify students in writing about the grading practices that will be used. The evaluation will be expressed according to the following letter system:

Grades	Quality Points
A	Superior 4 per credit hour
B	Above Average 3 per credit hour
C	Average 2 per credit hour
D	Lowest Passing Grade 1 per credit hour
F	Failure 0 per credit hour
CE	Credit by Examination Grade 0 per credit hour
I	Incomplete 0 per credit hour
WA	Withdrawal after the 10% date 0 per credit hour
WB	Withdrawal with no attendance 0 per credit hour
AU	Audit 0 per credit hour
X	No grade reported by instructor 0 per credit hour
S	Satisfactory 0 per credit hour
U	Unsatisfactory 0 per credit hour
TR	Transferred from another school or university 0 per credit hour
IP	In Progress 0 per credit hour

*Grades preceded by an "R" on the grade report indicate the course has been repeated.*

*Grades preceded by an "E" on the grade report indicate excluded (Academic forgiveness Policy)*

## **WHAT THE GRADES MEAN**

**F Grades** - The grade F is recorded if the student has failed on the combined evaluation of work through the semester.

**CE Grade** - A student may petition the course instructor and department chair for permission to seek course credit by examination. (See "Credit by Exam," page 56.)

**TR Grade** - The "TR" grade is assigned to credits accepted in transfer, or other credits granted. The grade authorizes credit without further qualification of student performance. The "TR" grade does not affect a student's grade point average in any way and is not used in determining whether a student qualifies to graduate with academic honors.

**I Grade** - When a student fails to complete the requirements of a course, the student may be given an "Incomplete" or "I" grade. To be awarded this grade, the student must present to the instructor valid reasons for not having completed the course requirements. The instructor and the student then complete an Incomplete Grade Agreement form. This agreement will determine the requirements for a course grade which must be completed by the twelfth week of the next semester. The grade "I" is not computed into the grade point average until it is replaced by a permanent grade. If the incomplete is not removed by the twelfth week of the semester, an "F" will be assigned.

**WA/WB Mark** - A student who wishes to withdraw from a course or courses within the first ten weeks of the semester may do so without the credit hours being computed as hours attempted.

Withdrawal from a course or courses after ten weeks for other than an appropriate cause determined by medical or unusual or unavoidable circumstances shall be counted as a grade earned and computed in the grade point average.

The mark "WA/WB" indicates the student withdrew from the course within the first ten weeks or at a later date for appropriate cause.

A student wishing to withdraw from a course or courses must follow the official procedure, which is initiated in the Office of the Registrar.

**AU Mark** - Students who wish to audit courses (see "Auditing a Course," page 55) must follow the regular registration procedures and declare the audit status to the course instructor. A student who registers for an audit may not receive a grade for the course. The fees are the same as for regular college credit. The decision to audit cannot be reversed.

**IP** - "IP" indicates unsatisfactory progress toward the completion of course work in developmental education courses. The "IP" grade allows a student in a developmental course to continue the course in a subsequent semester until all course requirements are met. The student must re-register for the course in the subsequent semester



and the grade will be assigned when the work has been concluded. Exceptions to continue the "IP" into a third semester must have written permission of the Director of Developmental Education (See "Academic Progress below").

**Grade Point Average (GPA)** To calculate a grade point average:

1. Convert the grades to quality points. Multiply the letter grades' values by the number of credit hours attempted in each course. Letter grades have the following values: A=4, B=3, C=2, D=1, F=0, WA/WB=0. (I, W, AU, TR, CE, and X are not included in the determination of GPA.) For example, if a student earns a B in a 3hour course, the quality points would be 9 (3 grade points times 3 credit hours equals 9 quality points).

2. Add all the quality points.

3. Add all the hours attempted.

4. Divide total quality points by the total hours attempted.

Only course work taken at Gaston College is used in computing grade point averages.

Advanced placement credits, credits transferred from accredited institutions, and credit by examination are used in computing a student's grade point average, but may be accepted toward a degree.

## **SATISFACTORY ACADEMIC PROGRESS**

### **Repeating a Course**

A student may repeat a course taken at Gaston College in order to improve his or her cumulative grade point average. Credit is given for the highest grade earned after repeating a course. Repeated courses will appear on the student's transcript; all course attempts will be shown. However, the cumulative grade point average will be computed to count only the course with the highest grade. Upon completion of the repeated course the student must notify the Office of the Registrar.

Specific requirements for repeating a course:

1. A student may repeat a course for credit or audit or a combination of the two no more than three times within a five year period.

2. A student may repeat a course when an "S" mark has been awarded no more than four times within a five-year period.

3. A student may not re-enroll for a course in which credit by examination (CE) has been awarded.

4. A student may not re-enroll for a course in which an incomplete (I) has been awarded until that "I" is removed.

### **Academic Alert/Suspension**

Any student who maintains less than a 2.00 cumulative grade point average is placed on academic alert. A student on academic alert must meet with his or her assigned advisor to develop a plan for removing the alert status.

If after two successive semesters the academic alert status has not been removed, the student will be placed on academic suspension and will not be allowed to re-enroll for one semester.

During the suspension period, the student is encouraged to meet with a counselor or advisor. If the student chooses another program, a change of program form must be initiated by the student. Suspended students, who feel that circumstances which led to the academic difficulty have changed, may appeal their status by completing the appropriate forms available from the Registrar's office or the Counseling Center. All appeals should include a realistic plan to achieve good academic standing, recognition of the problems that have affected your academic progress, and a plan to resolve those issues. If your appeal is accepted, you will be allowed to register and continue your enrollment at Gaston College on a probationary basis. However, you must see Financial Aid before your aid can be reinstated. Also, you will be required to work closely with your advisor to improve your performance and return to good standing. You should plan to take advantage of any study skill seminars and have increased contact with your academic advisor. Gaston College may prescribe additional requirements as a condition of re-admission.

### **Academic Forgiveness**

The Academic Forgiveness Policy allows Gaston College students who have experienced academic difficulty at Gaston College to have one opportunity to make a fresh start. Using this policy, a student may request academic forgiveness of previous poor academic performance. A student is eligible for academic forgiveness only once. This policy provides for excluding all coursework completed prior to a specific date from the calculation of the cumulative grade point average. Courses completed with a C grade or higher grade may count as a credit toward graduation. However, no course prior to the specified date counts in the calculation of the new cumulative grade point average.

### **Grounds for Student Dismissal**

Academic standards and compliance with accreditation and legal requirements are maintained, in part, through regulations and policies related to student behavior both in and out of the classroom, that is, matriculation for scholarly pursuit and citizenship. The college has the right to dismiss a student in violation of regulations or policies.

A student may be dismissed from a course or a program under academic regulations or from the college for violations of citizenship regulations.

Dismissal from Gaston College for academic reasons may be initiated by a faculty member, department chair, division dean, or the student's advisor upon petition to the Vice President for Academic Affairs.



Academic dismissal based upon the concept of “Satisfactory Progress” in a specific course or program is stated in terms of minimum grades; completion of course sequences; and the achievement of certain knowledges, skills, and abilities.

Reinstatement of a dismissed student is possible only by permission of the Vice President for Academic Affairs. Note: Dismissal is to be distinguished from academic alert. Academic alert is a temporary sanction administered by the student’s advisor or the department chair in terms of a “Satisfactory Progress” statement. That department chair establishes the condition of the alert, that is, duration, remediation, and proficiency demonstration. Appeal of an alert is presented to the Vice President for Academic Affairs by the division dean.

### **Dismissal from an Occupational Program**

If the department chair determines that a student is not a safe and dependable practitioner in the lab, shop, clinic, or field area in the progress of a course, the student may be dismissed from the program with the concurrence of the Vice President for Academic Affairs through the due process procedure. Due to the fact that certain courses of many occupational programs are prescribed in a one- or two-year sequential pattern and are offered only once during the sequence, a student has no opportunity to repeat one of these courses or to elect a substitute course. Therefore, a student who fails one of these courses will be dismissed from the program at the end of the semester in which the failure occurs.

Students dismissed from an occupational program under this policy may petition for re-admission in a later class.

## **HONORS LIST**

### **President’s List**

The President’s List is an honor roll for students attaining a grade point average of 4.00 on 12 or more hours of work (not including CE credits) in any given semester and with no withdrawals or incompletes recorded.

### **Dean’s List**

The Dean’s List is an honor roll for students attaining a grade point average of 3.50 on 12 or more hours of work (not including CE credits) in any given semester and with no grade lower than a “B” and no withdrawals or incompletes recorded.

### **Honor’s List**

The Honor’s List is an honor roll for part-time students attaining a grade point average of 3.5 on 6 to 11 credit hours of work (not including CE credits) in any given semester and with no withdrawals or incompletes being recorded.

# GRADUATION

Requirements for the degree, diploma, or certificate will vary according to the curriculum. Students should refer to their particular program requirements.

A 2.0 grade point average is required for graduation.

At least 25 percent of semester credit hours for an associate degree or diploma must be completed in attendance at Gaston College.

Courses numbered less than 100 do not count for graduation credit.

## **Graduation Procedures**

Students are required to file graduation applications with the Office of the Registrar. The application deadline is listed in the student calendar. Late graduation applications are not accepted. Commencement exercises to award degrees and diplomas to students in respective divisions are at the conclusion of the spring and summer terms. A graduation fee of \$15.00 is charged to each graduation student. The specific date of the commencement ceremony is listed in the college calendar in front of this catalog.

## **Graduation with Honors**

Gaston College recognizes excellent scholarship by designating the status of "Honor" or "High Honor" to selected graduates receiving associate degrees or diplomas. To be eligible for graduation with "Honor," a student must have a cumulative grade point average of 3.50 or above but below 3.80.

To be eligible for graduation with "High Honor," a student must have a cumulative grade point average of 3.80 or above.

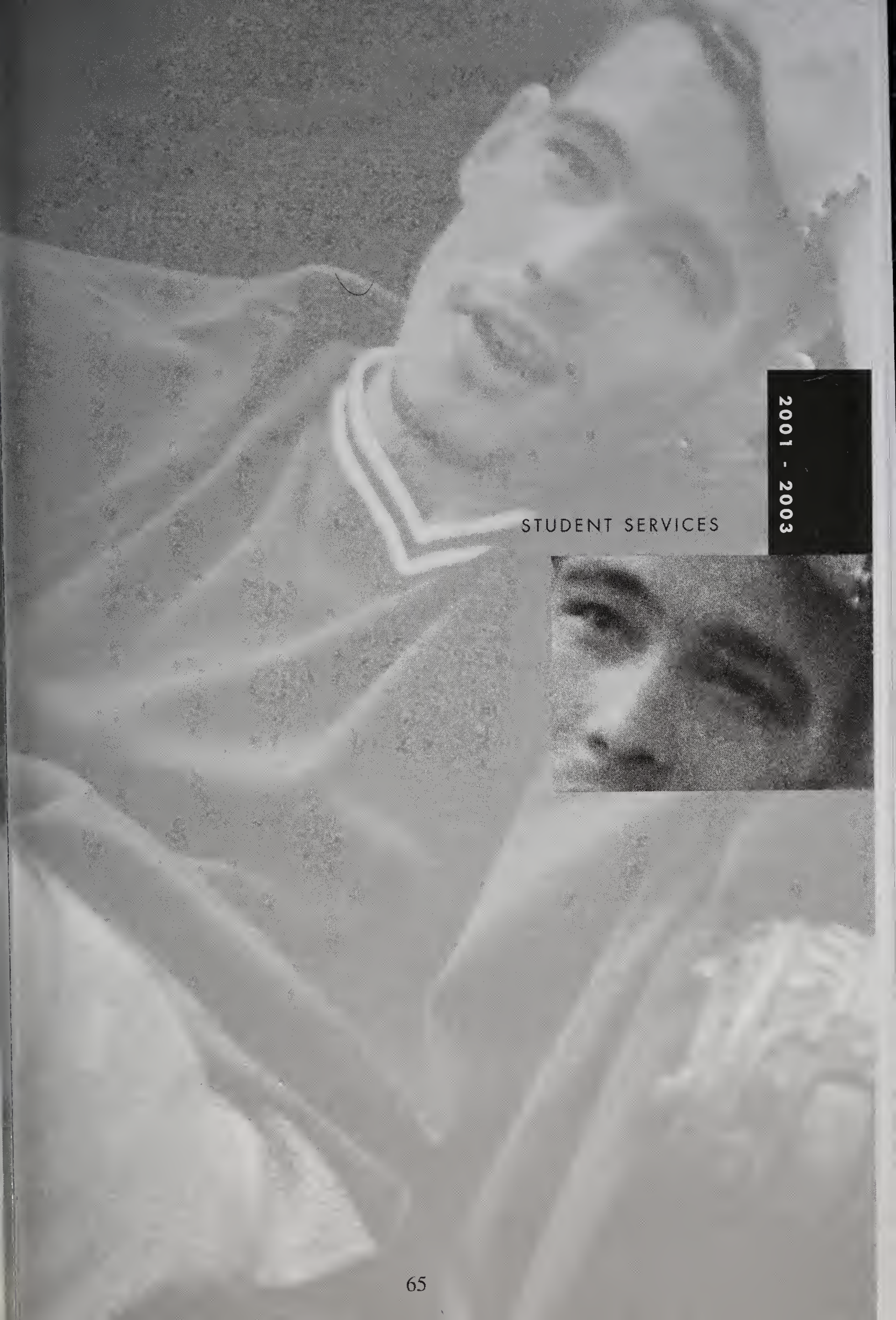
## **Graduation Marshals**

Students who have completed 32 credit hours in a degree or diploma program at Gaston College and who have maintained the highest scholastic averages during their first year are honored by being asked to serve as graduation marshals. The marshal who has the best academic record is designated chief marshal.



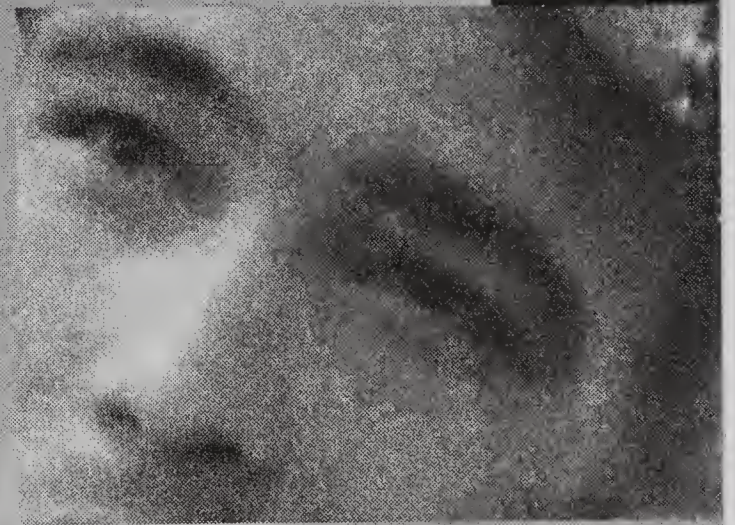






2001 - 2003

STUDENT SERVICES





## **COUNSELING AND CAREER DEVELOPMENT CENTER**

The Counseling and Career Development Center provides two major counseling services to Gaston College students: counseling and career services. The center is located in room 218 of the Myers Center. All services are free and confidential.

### **Counseling Services**

The counseling staff provides professional guidance and counseling services. After completing admission requirements, each student is invited to visit a member of the counseling staff. The counselors offer assistance in choosing an appropriate program of study. Thereafter, it is recommended that students meet with a counselor or faculty advisor on a regular basis to review plans and progress.

Some of the counseling services provided are personal counseling, career and academic advisement, assessment (aptitude, interest, personality, and values inventories), college transfer information, student activities information, and academic placement testing.

### **Career Services**

The counseling staff provides career guidance to students who need help deciding on a career direction. Interest inventories and computerized assessment instruments are available to assist students in making career decisions. Resources are available that provide information on training and course requirements, work conditions, salaries and employment outlook, resume development, and interviewing strategies.

## **STUDENT ACTIVITIES**

Gaston College recognizes the value of student activities. The college provides a well balanced program developed in response to student requests and needs.

A large measure of responsibility for campus affairs is in the hands of the students advised by the chief student services officer and faculty members. The students plan and present many co-curricular campus activities. Activities vary from semester to semester depending upon student choice.

Participation in college governance by students may include membership on numerous college and campus committees including college committees on curriculum, degree requirements, and academic calendar; affirmative action and campus grievance programs.

More information about student activities is available in the Office of the Vice President of Student Services.

## **STUDENT IDENTIFICATION CARD**

Each student should have a Gaston College identification (ID) card. It is required for registration activities, for library checkout, and for admittance to social events.

Each student will receive a Gaston College ID card. The Gaston College ID card is non-transferable and is void unless it is signed by the student and validated for the current term.

Loss or theft of a Gaston College ID card should be reported within 24 hours to the chief student services officer. The cost for a replacement ID card is \$1.00.

## **COLLEGE BOOKSTORE**

### **Dallas Campus**

The Gaston College Main Bookstore is located in the Myers Center Building at 201 Highway 321 South. It provides new and used textbooks in support the College's mission statement to support the quality programs and services to Gaston and Lincoln Counties. The bookstore also provides supplies, computer software and various course-related items as needed by our students. It stocks imprinted apparel, gifts, greeting cards and general items to students, faculty/staff and the community at large.

The Main College Bookstore is open Monday – Thursday, 8:00 a.m. – 7:00 p.m. and Friday, 8:00 a.m. – 3:30 pm. Hours during semester breaks and the summer term are subject to change. For further information, please call 704-922-6428.

An ATM is located in the bookstore lobby along with a copy machine for the convenience of our students.

Used Books in good condition are purchased back from students the last three days of each semester. The buybacks occur during regular store hours. The bookstore's web page may be accessed from the college's website, [www.gaston.cc.nc.us](http://www.gaston.cc.nc.us)  
Textbooks can now be ordered on the web.

Returns and Refund Policy – Textbooks may be returned in good condition for a full refund within the first two weeks of class or ten days from the date of purchase. All returns must be accompanied by a register receipt and purchased for the current term. (No exceptions)

### **Lincoln Campus**

The Gaston College Bookstore at Lincoln Campus (LC) is located on the second floor, Suite 201. Textbooks are available for all classes taught at LC along with student supplies.

The Lincoln Campus Bookstore is open Monday – Thursday, 8:00 a.m. – 5:00 p.m. and Friday 8:00 a.m. – 3:30 p.m. Hours during the summer term and when classes are not in session, are subject to change. For further information, please call 704-748-1075.



## **WSGE 91.7 FM RADIO STATION**

WSGE 91.7 FM radio station, with studios and transmitter located within the Gaston College campus, signed on the air October 27, 1980. WSGE operates 24 hours per day/ 365 days per year, offering entertainment and community programming including talk, Big Band, Blues, Classic Rock, Carolina Beach Music, Shag, local and regional artists, and Contemporary Christian Music. The broadcast area includes over 2.6 million people.

## **EARLY CHILDHOOD DEVELOPMENT CENTER/ SUMMER CAMP**

The Early Childhood Development Center on the campus of Gaston College provides year-round child care in a creative learning environment for children ages six weeks to five years. In addition, Summer Camp is offered for school-aged children in June and July. Children of faculty, staff, students, and the community are accepted and enrolled according to the date of application and availability of space. The center is open Monday through Friday, 7:30 a.m. to 5:30 p.m.

## **FOOD SERVICE/VENDING**

The Gaston College Café is located in the Myers Center Building next to the bookstore. The hours of operation are Monday – Friday, 7:00 a.m. – 1:30 p.m. Hot meals, sandwiches and beverages are available during this time. Also, vending machines are located throughout the campus in most buildings.

The Gaston College Lincoln Campus has vending machines in the student lounge.

## **HOUSING**

Gaston College is a commuter institution designed to serve residents of the surrounding area and does not provide housing for its students.



2001 - 2003

DEGREE PROGRAMS





# ELECTIVES

The following courses have been approved as electives for transfer degrees.

ACC 120 Prin. of Accounting I  
 ACC 121 Prin. of Accounting II  
 ANT 210 General Anthropology  
 ANT 220 Cultural Anthropology  
 ANT 221 Comparative Cultures  
 ANT 230 Physical Anthropology  
 ANT 240 Archaeology

All art courses have been approved as electives for transfer degrees.

BIO 110 Principles of Biology  
 BIO 111 General Biology I  
 BIO 112 General Biology II  
 BIO 120 Intro. Botany  
 BIO 130 Intro. Zoology  
 BIO 140 Environmental Biology  
 BIO 140A Environ. Biology Lab  
 BIO 146 Regional Natural History  
 BIO 150 Gen. in Human Affairs  
 BIO 155 Nutrition  
 BIO 163 Basic A & P I  
 BIO 165 A & P I  
 BIO 166 A & P II

BIO 165 & 166 must be taken at the same school to transfer.

BIO 168 A & P I  
 BIO 169 A & P II  
 BIO 175 Gen. Microbiology  
 BIO 271 Pathophysiology  
 BIO 275 Microbiology

BUS 110 Intro. to Business  
 BUS 115 Business Law I  
 BUS 228 Business Statistics

CHM 130 Gen. Org, & Biochem.  
 CHM 130A Gen. Org, & Bio. Lab  
 CHM 151 General Chemistry I  
 CHM 152 General Chemistry II  
 CHM 251 Organic Chemistry I  
 CHM 252 Organic Chemistry II  
 CHM 261 Quantitative Analysis

CIS 110 Intro. To Computers  
 CIS 115 Intro. Program. & Logic

CJC 111 Intro. To Criminal Justice  
 CJC 121 Law Enforcement Oper.  
 CJC 141 Corrections

COM 110 Intro. To Communication  
 COM 231 Public Speaking

CSC 120 Computing Fund. I  
 CSC 130 Computing Fund. II  
 CSC 134 C++ Programming  
 CSC 136 FORTRAN Program.  
 CSC 220 Machine Implemen.

DFT 170 Engineering Graphics

ECO 151 Survey of Economics  
 ECO 251 Prin. Of Microeconomics  
 ECO 252 Prin. Of Macroeconomics

ENG 112 Arg.-Based Research  
 ENG 114 Prof. Research & Report  
 ENG 131 Intro. To Literature  
 ENG 231 Amer. Literature I  
 ENG 232 Amer. Literature II  
 ENG 241 British Literature I  
 ENG 242 British Literature II  
 ENG 272 Southern Literature  
 ENG 273 African-American Lit.  
 ENG 274 Literature by Women

FRE 111 Elementary French I  
 FRE 112 Elementary French II  
 FRE 141 Culture and Civilization  
 FRE 151 Francophone Literature  
 FRE 161 Cultural Immersion  
 FRE 211 Intermediate French I  
 FRE 212 Intermediate French II

GEL 111 Intro. Geology  
 GEL 113 Historical Geology  
 GEL 120 Physical Geology  
 GEL 230 Environmental Geology

GER 111 Elementary German I  
 GER 112 Elementary German II

GEO 111 World Regional Geo.  
 GEO 112 Cultural Geography  
 GEO 113 Economic Geography  
 GEO 130 Gen. Physical Geography  
 GEO 131 Physical Geography I  
 GEO 132 Physical Geography II

HEA 110 Personal Health & Well.  
 HEA 112 First Aid and CPR  
 HEA 120 Community Health

HIS 111 World Civilizations I  
 HIS 112 World Civilizations II  
 HIS 114 Comparative World His.  
 HIS 115 Intro. To Global History  
 HIS 116 Current World Problems  
 HIS 121 Western Civilizations I

HIS 122 Western Civilizations II  
HIS 131 American History I  
HIS 132 American History II  
HIS 161 Science & Technology  
HIS 162 Women and History  
HIS 211 Ancient History  
HIS 212 Medieval History  
HIS 213 Modern Europe to 1815  
HIS 214 Mod. Europe Since 1815  
HIS 221 African-Amer. History  
HIS 236 North Carolina History  
HIS 293 Selected Topics

HUM 110 Technology and Society  
HUM 115 Critical Thinking  
HUM 120 Cultural Studies  
HUM 121 The Nature of America  
HUM 122 Southern Culture  
HUM 130 Myth in Human Culture  
HUM 150 Amer. Women's Studies  
HUM 211 Humanities I  
HUM 212 Humanities II  
HUM 220 Human Val. & Meaning

MAT 140 Survey of Mathematics  
MAT 151 Statistics I  
MAT 151A Statistics I Lab  
MAT 161 College Algebra  
MAT 161A College Algebra Lab  
MAT 162 College Trigonometry  
MAT 162A College Trig. Lab  
MAT 175 Precalculus  
MAT 175A Precal. Lab  
MAT 252 Statistics II  
MAT 252A Statistics II Lab  
MAT 263 Brief Calculus  
MAT 263A Brief Cal. Lab  
MAT 271 Calculus I  
MAT 272 Calculus II  
MAT 273 Calculus III  
MAT 280 Linear Algebra  
MAT 285 Differential Equations

All music courses have been approved as  
electives for transfer degrees.

All PE courses have been approved as elec-  
tives for transfer degrees.

PHI 210 History of Philosophy  
PHI 215 Philosophical Issues  
PHI 220 Western Philosophy I  
PHI 221 Western Philosophy II  
PHI 230 Intro. To Logic  
PHI 240 Intro. To Ethics  
PHI 250 Philosophy of Science  
PHS 130 Earth Science  
PHS 140 Weather and Climate  
PHY 110 Conceptual Physics  
PHY 110A Conceptual Physics Lab

PHY 151 College Physics I  
PHY 152 College Physics II  
PHY 251 General Physics I  
PHY 252 General Physics II  
PHY 253 Modern Physics

POL 110 Intro to Political Science  
POL 120 American Government  
POL 210 Comparative Gov.  
POL 220 International Relations

PSY 150 General Psychology  
PSY 211 Psych. Of Adjustment  
PSY 237 Social Psychology  
PSY 239 Psycho. of Personality  
PSY 241 Dev. Psychology  
PSY 243 Child Psychology  
PSY 246 Adolescent Psychology  
PSY 249 Psychology of Aging  
PSY 259 Human Sexuality  
PSY 281 Abnormal Psychology  
PSY 292 Selected Topics in Psych.  
PSY 293 Selected Topics in Psych.

REL 110 World Religions  
REL 111 Eastern Religions  
REL 112 Western Religions  
REL 211 Intro. to Old Testament  
REL 212 Intro. to New Testament  
REL 221 Religion in America

SOC 210 Intro. To Sociology  
SOC 213 Soc. of the Family  
SOC 215 Group Processes  
SOC 220 Social Problems  
SOC 225 Social Diversity  
SOC 230 Race & Ethnic Relations  
SOC 240 Social Psychology  
SOC 242 Sociology of Deviance

SPA 111 Elementary Spanish I  
SPA 112 Elementary Spanish II  
SPA 141 Culture & Civilization  
SPA 151 Hispanic Literature  
SPA 161 Cultural Immersion  
SPA 211 Intermediate Spanish I  
SPA 212 Intermediate Spanish II

Students are strongly urged to re-take classes  
in which D's are made.

The Comprehensive Articulation Agreement  
enables Gaston College graduates who are  
admitted to UNC institutions to transfer with  
junior status. Graduates must earn a grade  
of C or better in approved transfer courses.

A list of transfer courses may be found in  
the catalog.



**Example of a Two-Year Schedule  
For the Associate in Arts Degree:  
For Students Taking Developmental Courses**

<b>FALL, FRESHMAN YEAR</b>		<b>SPRING, FRESHMAN YEAR</b>	
<u>Course Prefix/Number/Title</u>	<u>SHC</u>	<u>Course Prefix/Number/Title</u>	<u>SHC</u>
ENG 090 Composition Strateg.	3	ENG 111 Expository Writing	3
ENG 090A Comp. Strat. Lab	1	MAT 070 Introductory Algebra	4
MAT 060 Essential Math	4	Humanities/Fine Arts core course	3
RED 090 Improv. College Read	4	Social/Behavioral Science core	3
ACA 118 College Study Skills	<u>2</u>	History Core Course	<u>3</u>
Total	14	Total	16

<b>1st SUMMER</b>	
<u>Course Prefix/Number/Title</u>	<u>SHC</u>
ENG 112 Arg-Based Research	3
MAT 080 Intermediate Algebra	4
Transferable elective	<u>3</u>
Total	10

<b>FALL, SOPHMORE YEAR</b>		<b>SPRING, SOPHMORE YEAR</b>	
<u>Course Prefix/Number/Title</u>	<u>SHC</u>	<u>Course Prefix/Number/Title</u>	<u>SHC</u>
Literature core course	3	Humanities/Fine Arts core course	3
Social/Behavioral Science course	3	Social/Behavioral Science core	3
Natural Science core course	4	Natural Science core course	4
Transferable elective	3	Transferable elective	3
Transferable elective	<u>3</u>	Transferable elective	<u>3-4</u>
Total	16	Total	16-17

<b>2nd SUMMER</b>	
<u>Course Prefix/Number/Title</u>	<u>SHC</u>
Humanities/Fine Arts core course	3
MAT 151 Statistics I	3
MAT 151A Statistics I Lab	1
Natural Science Core	<u>4</u>
Total	11

**Total    64-65 SHC**

\*2 Math Lab hours would add into elective hours

## Example of a Two-Year Schedule for the Associate in Arts Degree:

### FALL, FRESHMAN YEAR

<u>Course Prefix/Number/Title</u>	<u>SHC</u>
ENG 111 Expository Writing	3
MAT 161 College Algebra	3
*MAT 161A College Algebra Lab	1
Humanities/Fine arts core course	3
History core course	3
Transferable elective	<u>3</u>
Total	16

### SPRING, FRESHMAN YEAR

<u>Course Prefix/Number/Title</u>	<u>SHC</u>
ENG 112 Arg-Based Research	3
MAT 151 Statistics I	3
*MAT 151A Statistics I Lab	1
Humanities/Fine Arts course	3
Social/Behavioral Science core	3
Transferable elective	<u>3-4</u>
Total	16-17

### FALL, SOPHMORE YEAR

<u>Course Prefix/Number/Title</u>	<u>SHC</u>
Literature core course	3
Social/Behavioral Science course	3
Natural Science core course	4
Transferable elective	3
Transferable elective	<u>3</u>
Total	16

### SPRING, SOPHMORE YEAR

<u>Course Prefix/Number/Title</u>	<u>SHC</u>
Humanities/Fine Arts core course	3
Social/Behavioral Science course	3
Natural Science core course	4
Transferable elective	3
Transferable elective	<u>3-4</u>
Total	16-17

**Total 64-66 SHC**

\*2 Math Lab hours would add into elective hours

## Example of a Two-Year Schedule for the Associate in Science Degree:

### FALL, FRESHMAN YEAR

<u>Course Prefix/Number/Title</u>	<u>SHC</u>
ENG 111 Expository Writing	3
Humanities/Fine arts core course	3
History Core Course	3
Transferable Math/Science elective	<u>4</u>
Total	13

### SPRING, FRESHMAN YEAR

<u>Course Prefix/Number/Title</u>	<u>SHC</u>
ENG 112 Arg-Based Research	3
MAT 175 Precalculus	4
MAT 175A Precalculus Lab	1
Humanities/Fine Arts core course	3
Social/Behavioral Science course	3
Transferable elective	<u>3</u>
Total	17

### FALL, SOPHMORE YEAR

<u>Course Prefix/Number/Title</u>	<u>SHC</u>
Literature core course	3
Social/Behavioral Science course	3
Natural Science core course	4
* (1st of two-course sequence)	
MAT 271 Calculus I	4
Transferable Math/Science elective	<u>3-4</u>
Total	17-18

### SPRING, SOPHMORE YEAR

<u>Course Prefix/Number/Title</u>	<u>SHC</u>
Humanities/Fine Arts core course	3
Social/Behavioral Science course	3
Natural Science core course *	4
* (2nd of two-course sequence)	
Transferable elective **	3-4
Transferable Math/Science elective	<u>4</u>
Total	17-18

**Total 64-66 SHC**

\* MAT 271, although required would add in to elective hours.

\*\*14 elective hours must be from transferable Science, math, or professional area.



### Course Offering Schedule

<u>Course No.</u>	<u>Course Name</u>	<u>Day</u>	<u>Night</u>
ACA 118	College Study Skills	F & Sp	F & Sp
ANT 210	General Anthropology	F & Sp	F & Sp
ANT 220	Cultural Anthropology	F, Sp, & Sum	
ANT 221	Comparative Cultures	F & Sp	F & Sp
ANT 240*	Archaeology		
ART 111	Art Appreciation	F & Sp	F & Sp
ART 114	Art History Survey I	F	
ART 115	Art History Survey II		Sp
ART 116	Survey of American Art		Sp
ART 117	Non-Western Art History	F	
ART 121	Design I	F	Sp
ART 122	Design II	Sp	F
ART 131	Drawing I	F & Sp	F
ART 132	Drawing II	F & Sp	F
ART 135	Figure Drawing I	Sp (Alternate Years)	
ART 171	Computer Art I	F	Sp
ART 212*	Gallery Assistantship I		
ART 213*	Gallery Assistantship II		
ART 214*	Portfolio and Resume		
ART 222	Wood Design I	Sp (Alternate Years)	
ART 223	Wood Design II	Sp (Alternate Years)	
ART 231	Printmaking I	F, Sp, & Sum	
ART 232	Printmaking II	F, Sp, & Sum	
ART 240	Painting I	F, Sp, & Sum	F, Sp, & Sum
ART 241	Painting II	F, Sp, & Sum	F, Sp, & Sum
ART 244	Watercolor		F (Alternate Years)
ART 245	Metals I	Sp (Alternate Years)	
ART 246	Metals II	Sp (Alternate Years)	
ART 247	Jewelry I	Sp	
ART 248	Jewelry II	Sp	
ART 261	Photography I	F & Sp	F & Sp
ART 262	Photography II	F & Sp	F & Sp
ART 271	Computer Art II		F
ART 275	Intro. To Commercial Art	Sp	F
ART 281	Sculpture I	F & Sp	F & Sp
ART 282	Sculpture II	F & Sp	F & Sp
ART 283	Ceramics I	F & Sp	F & Sp
ART 284	Ceramics II	F & Sp	F & Sp
ART 285	Ceramics III	F & Sp	F & Sp
ART 286	Ceramics IV	F & Sp	F & Sp
ART 288	Studio	F & Sp	F & Sp
BIO 110	Princ. Of Biology	F, Sp, & Sum	Sp
BIO 111	Gen. Biology	F, Sp, & Sum	F
BIO 112	Gen. Biology II	Sp	Sp
BIO 120	Intro. Botany	F (Alternate Years, odd)	
BIO 130	Intro. Zoology	F (Alternate Years, even)	
BIO 140/140A	Env. Biology	F (Alternate Years, odd)	
BIO 146	Reg. Nat. History	F (Alternate Years, even)	
BIO 150*	Genetics Hum. Aff.		
BIO 155*	Nutrition	Sp	
BIO 163	Basic A & P	F, Sp, & Sum	F & Sp
BIO 165*	A & P I		
BIO 166*	A & P II		
BIO 168	A & P I	F, Sp, & Sum	F & Sp
BIO 169	A & P II	F, Sp, & Sum	F & Sp
BIO 175	Gen. Micro.	Sum	
BIO 198*	Seminar in Bio.		

BIO 271	Pathophysiology	Sp (Lincoln Campus)	
BIO 275	Microbiology	F & Sp	F & Sp
BIO 291 – 293	Sel. Topics Bio.		
CHM 121/121A	Found. Of Chem.	F, Sp, & Sum	Sp
CHM 130/130A	Gen. Or. & Biochem.	Sp & Sum	
CHM 151	Gen. Chemistry I	F & Sp	F
CHM 152	Gen. Chemistry II	F, Sp, & Sum	Sp
CHM 198*	Seminar in Chem.		
CHM 251	Organic Chemistry I	F (Alternate Years)	
CHM 252	Organic Chemistry II	Sp (Alternate Years)	
CHM 261*	Quantitative analysis		
CJC Courses*			
COM 110	Intro. to Com.	F	
COM 231	Public Speaking	F & Sp	
EDU 113*	Family/Early Child Cred.		
EDU 119	Early Childhood Ed.	F & Sp	F & Sp
EDU 131	Child, Family, & Comm.	F	F
EDU 144	Child Development I	F	F
EDU 145	Child Development II	Sp	Sp
EDU 146	Child Guidance	F & Sp	F & Sp
EDU 153	Health, Safety, & Nutr.	F	F
EDU 155	Art & Drama for Child.	Sp	Sp
EDU 185	Cognitive & Lang. Act.	F	F
EDU 221	Child. With Sp. Needs	Sp	Sp
EDU 234	Infants, Toddlers, & Twos	F	F
EDU 235	School-Age Dev. & Prog.	Sp	Sp
EDU 252	Math & Sci. Activities	Sp	Sp
EDU 261	Early Childhood Admin. I	F	F
EDU 262	Early Childhood Admin. II	Sp	Sp
EDU 280	Literacy Experiences	Sp	Sp
EDU 282	Early Childhood Lit.	F	F
EDU 288	Adv. Issues/Early Child Ed.	Sp	Sp
ENG 080	Writing Foundations	F, Sp, & Sum	F, Sp, & Sum
ENG 090	Composition Strategies	F, Sp, & Sum	F, Sp, & Sum
ENG 101	Applied Communications	F, Sp, & Sum	F, Sp, & Sum
ENG 111	Expository Writing	F, Sp, & Sum	F, Sp, & Sum
ENG 112	Arg.-Based Research	F, Sp, & Sum	F, Sp, & Sum
ENG 114	Prof. Res. & Reporting	F, Sp, & Sum	F, Sp, & Sum
ENG 115	Oral Communications	F (Lincoln Campus)	
ENG 131	Intro. To Lit.	F, Sp, & Sum	F, Sp, & Sum
ENG 231	American Lit. I	F, Sp, & Sum	
ENG 232	American Lit. II	F, Sp, & Sum	
ENG 241	British Lit. I	F, Sp, & Sum	
ENG 242	British Lit. II	F, Sp, & Sum	
ENG 272*	Southern Literature		
ENG 273*	African-American Lit.		
ENG 274*	Literature by Women		
FRE 111	Elementary French I	F & Sp	F & Sp
FRE 112	Elementary French II	F & Sp	F & Sp
FRE 141*	Culture and Civilization		
FRE 151*	Francophone Lit.		
FRE 161 *	Cultural Immersion		
GEL 111 **	Intro. Geology	F & Sp	F
GEO 111 **	World Reg. Geog.	F & Sp	Sp
GEO 112	Cultural Geog.	F	



GEO 130	General Physical Geography	Sp (Alternate Years, odd)	
GEO 131*	Physical Geog. I		
GEO 132 *	Physical Geog. II		
HIS 111	World Civilization I	F, Sp, & Sum	F, Sp, & Sum
HIS 112	World Civilization II	F, Sp, & Sum	F, Sp, & Sum
HIS 131	American History I	F, Sp, & Sum	
HIS 132	American History II	F & Sp    F & Sp	
HIS 161*	Science & Technology		
HIS 211	Ancient History	F	F
HIS 212	Medieval History	Sp	
HIS 236*	North Carolina History		
HIS 293	Selected Topics (Study Tour)		F & Sp
HUM 115	Critical Thinking	F	
LEX Courses*			
MAT 060	Essential Mathematics	F, Sp, & Sum	F & Sp
MAT 070	Introductory Algebra	F, Sp, & Sum	F & Sp
MAT 080	Intermediate Algebra	F, Sp, & Sum	F & Sp
MAT 101	Applied Math. I	F, Sp, & Sum	F
MAT 110	Math. Measurement	Sp	
MAT 115	Mathematical Models	F	F
MAT 120	Geometry & Trig.	F, Sp, & Sum	F & Sp
MAT 121	Algebra/Trig. I	F & Sp	Sp
MAT 122	Algebra/Trig. II	Sp & Sum	Sum
MAT 140*	Survey of Mathematics		
MAT 151/151A	Statistics I	F, Sp, & Sum	F & Sp
MAT 161/161A	College Algebra	F, Sp, & Sum	F & Sp
MAT 175/175A	Precalculus	F & Sp	F & Sp
MAT 223	Applied Calculus	F	F
MAT 252	Statistics II	Sp	
MAT 263/263A	Brief Calculus	Sp	Sp
MAT 271	Calculus I	F & Sp	
MAT 272	Calculus II	Sp	
MAT 273	Calculus III	F	
MAT 280 *	Linear Algebra		
MAT 285	Differential Equations	Sp	
MUS 110	Music Appreciation	F, Sp & Sum	
MUS 113	American Music	F & Sp	
Other MUS Courses*			
PHI 210	History of Philosophy	Sp	
PHI 215	Philosophical Issues	F & Sp	F & Sp
PHI 230	Introduction to Logic	Sp & Sum	
PHI 240	Introduction to Ethics	F, Sp, & Sum	F, Sp & Sum
PHS 130	Earth Science	Sp	
PHS 140*	Weather & Climate	Sp (Alternate Years, even)	
POL 120	American Government	F, Sp, & Sum	F, Sp, & Sum
POL 130	State & Local Gov.		F & Sp
POL 220	International Relations	F	
PSY 101*	Applied Psychology		
PSY 102*	Human Relations		
PSY 110*	Life Span Development		
PSY 118*	Interpersonal Psy.		
PSY 135*	Group Processes		

PSY 150	General Psychology	F, Sp, & Sum	F, Sp, & Sum
PSY 183	Psy. of Addiction	Sp	Sp
PSY 211*	Psy. of Adjustment		
PSY 239	Psy. of Personality	F	F
PSY 241	Developmental Psy.	F, Sp, & Sum	F, Sp, & Sum
PSY 243*	Child Psychology		
PSY 244	Child Development I	F	F
PSY 245	Child Development II	Sp	Sp
PSY 246*	Adolescent Psychology		
PSY 249*	Psy. of Aging		
PSY 259*	Human Sexuality		
PSY 281	Abnormal Psychology	F, Sp, & Sum	F, Sp, & Sum
PSY 285*	Psychological Statistics		
PSY 292*	Selected Topics in Psy.		
PSY 293*	Selected Topics in Psy.		
RED 080	Intro. to College Reading	F, Sp, & Sum	F, Sp, & Sum
RED 090	Impr. College Reading	F, Sp, & Sum	F, Sp, & Sum
RED 111	Critical Reading for College		
REL 110	World Religions	F & Sp	F & Sp
REL 111	Eastern Religions	Sp	
REL 211	Old Testament	F & Sp	F & Sp
REL 212	New Testament	F & Sp	F & Sp
SOC 210	Introduction to Soc.	F, Sp, & Sum	F, Sp, & Sum
SOC 213	Sociology of Family	F, Sp, & Sum	F, Sp, & Sum
SOC 225	Social Diversity	F & Sp	F & Sp
SOC 240	Social Psychology	F & Sp	
SOC 242*	Sociology of Deviance		
SPA 111	Elementary Spanish I	F, Sp, & Sum	F, Sp, & Sum
SPA 112	Elementary Spanish II	F, Sp, & Sum	F, Sp, & Sum
SPA 120*	Spanish in the Workplace		
SPA 141*	Culture and Civilization		
SPA 161*	Cultural Immersion		
SPA 211*	Intermediate Spanish I		
SPA 212*	Intermediate Spanish II		

The course schedule is subject to change and subject to enrollment.

Courses may be offered more often than indicated.

\* Offered on demand only. On demand means when requested by a department chairperson or when at least 10 students request the course and an instructor can be provided.

\*\* May be offered by cassette



## Associate in Arts (A10100)

The Associate in Arts degree shall be granted for planned programs of study consisting of a minimum of 64 and a maximum of 65 semester hours of approved college transfer courses. Within the degree program, the college shall include opportunities for the achievement of competence in reading, writing, oral communications, fundamental mathematical skills, and the basic use of computers.

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						

### ENGLISH COMPOSITION (6 SHC)

Students will not receive credit for both ENG 112 and ENG 114.

ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3

### HUMANITIES/FINE ARTS (12 SHC)

Select four courses from at least three of the following discipline areas.

At least one course must be a literature course.

#### ART

ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3

#### COMMUNICATION

COM 231	Public Speaking	3	0	0	0	3
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#### ENGLISH

ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3

#### FOREIGN LANGUAGES

FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3

#### HUMANITIES

HUM 110	Technology and Society	3	0	0	0	3
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#### MUSIC

MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3

**PHILOSOPHY**

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

**RELIGION**

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas. At least one course must be a history course.

**ANTHROPOLOGY**

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

**ECONOMICS**

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3



**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111.

*Mathematics (6 SHC):* MAT 161 and MAT 161A are required. The other unit may be selected from among other quantitative subjects, such as computer science and statistics. Select at least one course from each series:

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS (Required)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**SELECT ONE OF THE FOLLOWING:**

CIS 115	Intro to Prog. & Logic	2	2	0	0	3
Or						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1
Or						
MAT 263	Brief Calculus	3	0	0	0	3
MAT 263A	Brief Calculus Lab	0	2	0	0	1

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

**Total Semester Hours Credit:**

**64-65**

\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

**Associate in Arts**  
**Pre-Major: Art Education**  
**(A1010A)**

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
Students will not receive credit for both ENG 112 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
<b>(ART 114 and 115 are required.)</b> At least one course must be a literature course.						
The fourth course must be chosen from one of the other disciplines.						
<b>ART</b>						
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3
<b>PHILOSOPHY</b>						
PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3



PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

## RELIGION

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

## SOCIAL/BEHAVIORAL SCIENCES (12 SHC)

Select four courses from at least three of the following discipline areas. At least one course must be a history course.

### ANTHROPOLOGY

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

### ECONOMICS

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

### HISTORY

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

### POLITICAL SCIENCE

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

### PSYCHOLOGY

PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

### SOCIOLOGY

SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

### GEOGRAPHY

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111.

*Mathematics (6 SHC)*

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab0	3	0	0	1	

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS (required)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**SELECT ONE OF THE FOLLOWING:**

CIS 115	Intro to Prog. & Logic	2	2	0	0	3
Or						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1

**OTHER REQUIRED HOURS (20-21 SHC)\***

The following courses are required (9 SHC):

ART 121	Design I	1	4	0	0	3
ART 122	Design II	1	4	0	0	3
ART 131	Drawing I	0	6	0	0	3

11 additional hours of approved college transfer courses are required.

To satisfy this requirement, two of the following courses are recommended:

ART 132	Drawing II	0	6	0	0	3
ART 171	Computer Art I	1	4	0	0	3
ART 231	Printmaking I	0	6	0	0	3
ART 240	Painting I	0	6	0	0	3
ART 283	Ceramics I	0	6	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
Or						
ART 117	Non-Western Art History	3	0	0	0	3
ART 247	Jewelry I	0	6	0	0	3
Or						
ART 245	Metals I	0	6	0	0	3
ART 250	Surface Design: Textiles	0	6	0	0	3



ART 261	Photography I	1	4	0	0	3
(ART 132 is a prerequisite for the following courses.)						
ART 135	Figure Drawing I	0	6	0	0	3
Or						
ART 281	Sculpture I	0	6	0	0	3

**Total Semester Hours Credit:**

**64-65**

\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

**Associate in Arts**  
**Pre-Major: Business Administration**  
**(A1010B)**

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44 SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
Students will not receive credit for both ENG 112 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b>						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3
<b>PHILOSOPHY</b>						
PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3



PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

## RELIGION

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

## SOCIAL/BEHAVIORAL SCIENCES (12 SHC)

Select four courses from at least three of the following discipline areas. **At least one course must be a history course. Courses marked with an \* are recommended.**

### ANTHROPOLOGY

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

### HISTORY

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

### POLITICAL SCIENCE

POL 110	Intro Political Science	3	0	0	0	3
*POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

### PSYCHOLOGY

*PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

### SOCIOLOGY

*SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

### GEOGRAPHY

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14-16 SHC)**

*Natural Sciences (8 SHC):* Two courses from the biological and physical science disciplines, including accompanying laboratory work are required. Students will not receive credit for both BIO 110 and BIO 111.

*Mathematics (6 SHC):* The following courses are required.

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**MATHEMATICS**

The following courses are required:

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

And

MAT 263	Brief Calculus	3	0	0	0	3
MAT 263A	Brief Calculus lab	0	2	0	0	1

**OTHER REQUIRED HOURS (20 SHC)\***

The following courses are required:

ACC 120	Principles of Accounting I	3	2	0	0	4
ACC 121	Principles of Accounting II	3	2	0	0	4
CIS 110	Introduction to Computers	2	2	0	0	3
ECO 251	Prin. Of Microeconomics	3	0	0	0	3
ECO 252	Prin. Of Macroeconomics	3	0	0	0	3

One of the following is required:

BUS 228	Business Statistics	2	2	0	0	3
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Or

MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics I Lab	0	2	0	0	1

**Total Semester Hours Credit:**

**64-65**

\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.



## Associate in Arts

### Pre-Major: Business Education and Marketing Education (A1010C)

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
Students will not receive credit for both ENG 112 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b>						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3

## PHILOSOPHY

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

## RELIGION

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

## SOCIAL/BEHAVIORAL SCIENCES (12 SHC)

One course must be a history course. Courses marked an \* are recommended.  
ECO 251 is required.

## ANTHROPOLOGY

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

## ECONOMICS

ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

## HISTORY

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

## POLITICAL SCIENCE

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

## PSYCHOLOGY

*PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

## SOCIOLOGY

*SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3



**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	General Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14-15 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111.

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab0	3	0	0	1	

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**MATHEMATICS (Required)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1
And						
CIS 110	Intro to Computers	2	2	0	0	3

**OTHER REQUIRED HOURS (19-21SHC)**

**The following are required (7 SHC):**

ACC 120	Principles of Accounting	3	2	0	0	4
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

**One of the following is required (3SHC):**

CIS 115	Intro. To Programming	2	2	0	0	3
CSC 134	C++ Programming	2	3	0	0	3

**Three of the following courses are recommended:**

ACC 121	Prin. Of Accounting II	3	2	0	0	4
BUS 110	Intro. To Business	3	0	0	0	3
BUS 115	Business Law I	3	0	0	3	
BUS 228	Business Statistics	2	2	0	0	3
Or						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics I Lab	0	2	0	0	1

**Total Semester Hours Credit:**

**64-65**

\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

Associate in Arts

Pre-Major: Criminal Justice

(A1010D)

	Title	Class	Lab	Clinical	Work	Credits
General Education Courses (44SHC)*						
ENGLISH COMPOSITION (6 SHC)						
Students will not receive credit for both ENG 112 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
HUMANITIES/FINE ARTS (12 SHC)						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b>						
ART						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
COMMUNICATION						
COM 231	Public Speaking	3	0	0	0	3
ENGLISH						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
FOREIGN LANGUAGES						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
HUMANITIES						
HUM 110	Technology and Society	3	0	0	0	3
MUSIC						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3



**PHILOSOPHY**

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

**RELIGION**

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

At least one course must be a history course.

**HISTORY**

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

The following courses are required:

**POLITICAL SCIENCE**

POL 120	American Government	3	0	0	0	3
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**PSYCHOLOGY**

PSY 150	General Psychology	3	0	0	0	3
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**SOCIOLOGY**

SOC 210	Intro. To Sociology	3	0	0	0	3
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**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111.

*Mathematics (6 SHC)*

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**MATHEMATICS (Required)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1
And						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses which have been approved for transfer.

**The following courses are required (9SHC):**

CJC 111	Intro. To Criminal Justice	3	0	0	0	3
CJC 121	Law Enforcement Oper.	3	0	0	0	3
CJC 141	Corrections	3	0	0	0	3

11 additional hours of approved college transfer courses are required.

**Total Semester Hours Credit: 64-65**



# Associate in Arts

## Pre-Major: English

### (A1010E)

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course. (A foreign language sequence is recommended.)</b>						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
OR						
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
OR						
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3
<b>PHILOSOPHY</b>						
PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3

PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

## RELIGION

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 198	Seminar in Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

## SOCIAL/BEHAVIORAL SCIENCES (12 SHC)

Select four courses from at least three of the following discipline areas. **At least one course must be a history course.**

### ANTHROPOLOGY

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

### ECONOMICS

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

### HISTORY

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

### POLITICAL SCIENCE

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

### PSYCHOLOGY

PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

### SOCIOLOGY

SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3



**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111.

*Mathematics (6 SHC)*

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab0	3	0	0	1	

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS (Required)**

MAT 161	College Algebra 3	0	0	0	3	
MAT 161A	College Algebra Lab	0	2	0	0	1

**SELECT ONE OF THE FOLLOWING:**

CIS 115	Intro to Prog. & Logic	2	2	0	0	3
OR						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

**One of the following courses is required:**

ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3

17 additional hours of approved college transfer courses are required.

**One of the following courses is recommended:**

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

**An intermediate foreign language sequence is recommended:**

FRE 211	Intermediate French I	3	0	0	0	3
FRE 212	Intermediate French II	3	0	0	0	3
Or						
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3

**Total Semester Hours Credit:** **64-65**

\*Students must meet the receiving university’s foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.



# Associate in Arts

## Pre-Major: English Education

### (A1010F)

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course. (ART 111 or MUS 110 is recommended as well as SPA 111 and 112 or FRE 111 and 112 or GER 111 and 112.)</b>						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3

## PHILOSOPHY

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

## RELIGION

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

## SOCIAL/BEHAVIORAL SCIENCES (12 SHC)

Select four courses from at least three of the following discipline areas. **At least one course must be a history course. PSY 150 is required; HIS 111 or 112 is recommended.**

### ANTHROPOLOGY

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

### ECONOMICS

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

### HISTORY

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

### POLITICAL SCIENCE

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

### PSYCHOLOGY

<b>PSY 150</b>	<b>General Psychology</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

### SOCIOLOGY

SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3



SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

## **GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

## **NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111.

### **Mathematics (6 SHC)**

#### **BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab	0	3	0	0	1

#### **CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

#### **GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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#### **PHYSICS**

PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

#### **MATHEMATICS**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

### **SELECT ONE OF THE FOLLOWING:**

CIS 115	Intro to Prog. & Logic	2	2	0	0	3
or						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1

### **OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

#### **The following course is required (4SHC):**

EDU 116	Intro. To Education	3	2	0	0	4
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#### **The following course is recommended:**

COM 231	Public Speaking	3	0	0	0	3
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**An intermediate foreign language sequence is recommended:**

FRE 211	Intermediate French I	3	0	0	0	3
FRE 212	Intermediate French II	3	0	0	0	3
Or						
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3

One of the following courses with multi-cultural or gender emphasis is recommended:

ENG 272	Southern Literature	3	0	0	0	3
ENG 273	African-American Lit.	3	0	0	0	3

Two additional 200-level survey courses in literature are recommended.

**Total Semester Hours** **64**

\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.



# Associate in Arts

## Pre-Major: Health Education

### (A1010G)

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
Students will not receive credit for both ENG 112 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course. COM 231 is recommended.</b>						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
*COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3

## PHILOSOPHY

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

## RELIGION

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

## SOCIAL/BEHAVIORAL SCIENCES (12 SHC)

Select four courses from at least three of the following discipline areas. **At least one course must be a history course. PSY 150 is required.**

### ANTHROPOLOGY

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

### ECONOMICS

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

### HISTORY

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

### POLITICAL SCIENCE

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

### PSYCHOLOGY

PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

### SOCIOLOGY

SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3



SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

### **GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

### **NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC): (BIO 111 and 112 or CHM 151 and 152 are required.)*

*Mathematics (6 SHC)*

#### **BIOLOGY**

BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4

#### **CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

#### **MATHEMATICS**

The following courses are required.

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

And

CIS 110	Introduction to Computers	2	2	0	0	3
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### **OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

#### **The following courses are required (8 SHC):**

HEA 110	Personal Health/Wellness	3	0	0	0	3
HEA 112	First Aid and CPR	1	2	0	0	2
HEA 120	Community Health	3	0	0	0	3

#### **The following sequence is required:**

BIO 168	Anatomy and Phys. I	3	3	0	0	4
BIO 169	Anatomy and Phys. II	3	3	0	0	4

#### **The following course is required (4 SHC):**

MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics I Lab	0	2	0	0	1

**Total Semester Hours Credit:**

**64-65**

\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

Associate in Arts  
Pre-Major: History  
(A1010H)

	Title	Class	Lab	Clinical	Work	Credits
General Education Courses (44SHC)*						
ENGLISH COMPOSITION (6 SHC)						
Students will not receive credit for both ENG 112 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
HUMANITIES/FINE ARTS (12 SHC)						
Select four courses from at least three of the following discipline areas. At least one course must be a literature course.						
ART						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
COMMUNICATION						
COM 231	Public Speaking	3	0	0	0	3
ENGLISH						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
FOREIGN LANGUAGES						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
HUMANITIES						
HUM 110	Technology and Society	3	0	0	0	3
MUSIC						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3



**PHILOSOPHY**

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

**RELIGION**

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas. **At least one course must be a history course.** HIS 111 and 112 are recommended.

**ANTHROPOLOGY**

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

*HIS 111	World Civilizations I	3	0	0	0	3
*HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111.

*Mathematics (6 SHC)*

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab0	3	0	0	1	

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**MATHEMATICS**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**SELECT ONE OF THE FOLLOWING:**

CIS 115	Intro to Prog. & Logic	2	2	0	0	3
or						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics I Lab	0	2	0	0	1

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

**The following courses are recommended:**

HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

**Total Semester Hours Credit: 64-65**

\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.



# Associate in Arts

## Pre-Major: Physical Education

### (A1010J)

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
Students will not receive credit for both ENG 112 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b> COM 231 is recommended.						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3

## PHILOSOPHY

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

## RELIGION

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

## SOCIAL/BEHAVIORAL SCIENCES (12 SHC)

Select four courses from at least three of the following discipline areas. **At least one course must be a history course.** PSY 150 is recommended.

### ANTHROPOLOGY

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

### ECONOMICS

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

### HISTORY

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

### POLITICAL SCIENCE

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

### PSYCHOLOGY

*PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

### SOCIOLOGY

SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3



**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Cultural Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. **(BIO 111 and 112 are recommended.)**

*Mathematics (6 SHC):* CIS 110 or MAT 151 and 151A are recommended.

**BIOLOGY**

*BIO 111	General Biology I	3	3	0	0	4
*BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**SELECT ONE OF THE FOLLOWING:**

*CIS 110	Intro. To Computers	2	2	0	0	3
or						
CIS 115	Intro. To Prog. & Logic	2	2	0	0	3
or						
*MAT 151	Statistics I	3	0	0	0	3
*MAT 151A	Statistics Lab	0	2	0	0	1

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer. **PED 110 and 2 SHC of PED electives are required.** 16 additional hours of approved college transfer courses are required.

**Total Semester Hours Credit:**

**64-65**

\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

Associate in Arts  
Pre-Major: Political Science  
(A1010K)

	Title	Class	Lab	Clinical	Work	Credits
General Education Courses (44SHC)*						
ENGLISH COMPOSITION (6 SHC)						
Students will not receive credit for both ENG 112 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
HUMANITIES/FINE ARTS (12 SHC)						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b> Either FRE 111 and 112 or GER 111 and 112 or SPA 111 and 112 are recommended. <b>COM 231 is recommended.</b>						
ART						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
COMMUNICATION						
*COM 231	Public Speaking	3	0	0	0	3
ENGLISH						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
FOREIGN LANGUAGES						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
HUMANITIES						
HUM 110	Technology and Society	3	0	0	0	3
MUSIC						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3
PHILOSOPHY						
PHI 210	History of Philosophy	3	0	0	0	3



PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

### RELIGION

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

### SOCIAL/BEHAVIORAL SCIENCES (12 SHC)

Select four courses from at least three of the following discipline areas. **At least one course must be a history course.** Courses marked by an \* are recommended.

#### ANTHROPOLOGY

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

#### ECONOMICS

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

*ECO 151	Survey of Economics	3	0	0	0	3
*ECO 251	Prin. of Microeconomics	3	0	0	0	3
*ECO 252	Prin. of Macroeconomics	3	0	0	0	3

#### HISTORY

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

#### POLITICAL SCIENCE

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

#### PSYCHOLOGY

*PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

#### SOCIOLOGY

*SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
*SOC 220	Social Problems	3	0	0	0	3
*SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

#### GEOGRAPHY

*GEO 111	World Geography	3	0	0	0	3
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*GEO 112	Cultural Geography	3	0	0	0	3
*GEO 130	Cultural Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111.

*Mathematics (6 SHC):* CIS 110 is recommended.

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS (required)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**SELECT ONE OF THE FOLLOWING:**

*CIS 110	Intro to Computers	3	0	0	0	3
or						
CIS 115	Intro to Prog. & Logic	2	2	0	0	3
or						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

**The following course is required:**

POL 120	American Government	3	0	0	0	3
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17 additional hours of approved college transfer courses are required.

**The following courses are recommended:**

POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

**Total Semester Hours Credit: 64-65**

\*Students must meet the receiving university’s foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.



# Associate in Arts Pre-Major: Psychology (A1010L)

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
Students will not receive credit for both ENG 112 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b>						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	3	
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3

## PHILOSOPHY

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

## RELIGION

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

## SOCIAL/BEHAVIORAL SCIENCES (12 SHC)

Select four courses from at least three of the following discipline areas. **At least one course must be a history course. PSY 150 is required.**

### ANTHROPOLOGY

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

### ECONOMICS

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

### HISTORY

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

### POLITICAL SCIENCE

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

### PSYCHOLOGY

*PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

### SOCIOLOGY

SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3



SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

## GEOGRAPHY

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

## NATURAL SCIENCES/MATHEMATICS (14 SHC)

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. **BIO 110 or 111 is required.** Students will not receive credit for both BIO 110 and BIO 111.

*Mathematics (6 SHC):* Select at least one course from each series.

## BIOLOGY

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab0	3	0	0	1	

## CHEMISTRY

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

## GEOLOGY

GEL 111	Introductory Geology	3	2	0	0	4
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## PHYSICS

PHY 151	College Physics I 3	2	0	0	4	
PHY 152	College Physics II	3	2	0	0	4

## MATHEMATICS (required)

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

## SELECT ONE OF THE FOLLOWING:

CIS 115	Intro to Prog. & Logic	2	2	0	0	3
or						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1

## OTHER REQUIRED HOURS (20-21 SHC)\*

Must include additional general education and professional courses that have been approved for transfer. Students intending to major in a psychology at a UNC institution are advised to take no more than 6 hours in psychology electives at the community college level.

**Total Semester Hours Credit:**

**64-65**

\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

Associate in Arts

Pre-Major: Social Science Secondary Education

(A1010M)

	Title	Class	Lab	Clinical	Work	Credits
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General Education Courses (44SHC)\*

ENGLISH COMPOSITION (6 SHC)

Students will not receive credit for both ENG 112 and ENG 114. **ENG 112 is recommended.**

ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3

HUMANITIES/FINE ARTS (12 SHC)

Select four courses from at least three of the following discipline areas. **At least one course must be a literature course.**

ART

ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3

ENGLISH

ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3

COMMUNICATION

COM 231	Public Speaking	3	0	0	0	3
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FOREIGN LANGUAGES

FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3

HUMANITIES

HUM 110	Technology and Society	3	0	0	0	3
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MUSIC

MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3



**PHILOSOPHY**

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

**RELIGION**

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

The following courses are required:

**HISTORY**

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3

**POLITICAL SCIENCE**

POL 120	American Government	3	0	0	0	3
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**SOCIOLOGY**

SOC 210	Intro. To Sociology	3	0	0	0	3
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**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111.

*Mathematics (6 SHC)*

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab0	3	0	0	1	

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS (REQUIRED)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**SELECT ONE OF THE FOLLOWING:**

CIS 115	Intro to Prog. & Logic	2	2	0	0	3
or						
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

**The following courses are required (9 SHC):**

GEO 111	World Regional Geo.	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

One of the following is required (3 SHC or 6 SHC): Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252. **Students must take either ECO 151 or the sequence ECO 251 and 252.**

ECO 151	Survey of Economics	3	0	0	0	3
or						
ECO 251	Prin. Of Microeconomics	3	0	0	0	3
and						
ECO 252	Prin. Of Macroeconomics	3	0	0	0	3

5-8 additional hours of approved college transfer courses are required to total 64 SHC of transferable courses.

**Total Semester Hours Credit: 64-65**



**Associate in Arts  
Pre-Major: Sociology  
(A1010N)**

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
<b>ENG 112 is recommended.</b>						
Students will not receive credit for both ENG 112 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
*ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b>						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3

## PHILOSOPHY

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

## RELIGION

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

## SOCIAL/BEHAVIORAL SCIENCES (12 SHC)

Select four courses from at least three of the following discipline areas. **At least one course must be a history course. SOC 210 is required and one of the following courses: SOC 213, 220, 225, or 240.**

## ANTHROPOLOGY

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

## ECONOMICS

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

## HISTORY

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

## POLITICAL SCIENCE

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

## PSYCHOLOGY

PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3



**SOCIOLOGY**

*SOC 210	Intro. To Sociology	3	0	0	0	3
*SOC 213	Sociology of the Family	3	0	0	0	3
*SOC 220	Social Problems	3	0	0	0	3
*SOC 225	Social Diversity	3	0	0	0	3
*SOC 240	Social Psychology	3	0	0	0	3

**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (14 SHC)**

*Natural Sciences (8 SHC):* Select two courses, including accompanying laboratory work, from among the biological and physical science disciplines. Students will not receive credit for both BIO 110 and BIO 111.

*Mathematics (6 SHC):* **MAT 151 and 151A are recommended.**

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab0	3	0	0	1	

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS (Required)**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**SELECT ONE OF THE FOLLOWING:**

CIS 115	Intro to Prog. & Logic	2	2	0	0	3
or						
*MAT 151	Statistics I	3	0	0	0	3
*MAT 151A	Statistics Lab	0	2	0	0	1

**OTHER REQUIRED HOURS (20-21 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

**Total Semester Hours Credit:**

**64-65**

# ASSOCIATE IN GENERAL EDUCATION (A10300)

The Associate in General Education degree shall be granted for planned programs of study consisting of a minimum of 64 and a maximum of 65 semester hours of approved courses. Within the degree program, the college shall include opportunities for the achievement of competence in reading, writing, oral communications, fundamental mathematical skills, and the basic use of computers.

	Title	Class	Lab	Clinical	Work	Credits
General Education Courses (15 SHC)*						

## ENGLISH COMPOSITION (6 SHC)

Students will not receive credit for both ENG 112 and ENG 114.

ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3

## HUMANITIES/FINE ARTS (3 SHC)

Select one course from the following discipline areas.

### ART

ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3

## COMMUNICATION

COM 231	Public Speaking	3	0	0	0	3
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## ENGLISH

ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3

## FOREIGN LANGUAGES

FRE 110	Intro. to French	2	0	0	0	2
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 110	Intro. to Spanish	2	0	0	0	2
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3

## HUMANITIES

HUM 110	Technology and Society	3	0	0	0	3
HUM 115	Critical Thinking	3	0	0	0	3



**MUSIC**

MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3

**PHILOSOPHY**

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

**READING**

RED 111	Critical Reading for College	3	0	0	0	3
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**RELIGION**

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (3 SHC)**

Select one courses from the following discipline areas.

**ANTHROPOLOGY**

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 116	Current World Problems	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

**Natural Sciences/Mathematics (3 SHC)**

Choose one course.

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 121	Foundations of Chemistry	3	0	0	0	3
CHM 121A	Foundations of Chem. Lab	0	2	0	0	1
CHM 131	Intro. to Chemistry	3	0	0	0	3
CHM 131A	Intro. to Chemistry Lab	0	3	0	0	1
CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**PHYSICAL SCIENCE**

PHS 110	Basic Physical Science	3	2	0	0	4
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**GENERAL SCIENCE**

SCI 110	Principles of Science	3	2	0	0	4
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**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 151	College Physics I 3	2	0	0	4	
PHY 152	College Physics II	3	2	0	0	4

**MATHEMATICS**

MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1
Or						
CIS 110	Intro to Computers	2	2	0	0	3
CIS 115	Intro to Prog. & Logic	2	2	0	0	3
Or						
MAT 151	Statistics I	3	0	0	0	3



MAT 151A	Statistics Lab	0	2	0	0	1
Or						
MAT 263	Brief Calculus	3	0	0	0	3
MAT 263A	Brief Calculus Lab	0	2	0	0	1

**OTHER REQUIRED HOURS (49-50 SHC)**

Must include additional general education and professional courses that have been approved for transfer and/or approved by the advisor or required for specific A.A.S. Programs.

**Total Semester Hours Credit:** **64-65**



**Gaston College**  
 Opportunities for Life

**Associate in Science  
(A10400)**

The Associate in Science degree shall be granted for planned programs of study consisting of a minimum of 64 and a maximum of 65 semester hours of approved college transfer courses. Within the degree program, the college shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers.

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44 SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
Students will not receive credit for both ENG 112 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course.</b>						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American History	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
HUM 110	Technology and Society	3	0	0	0	3



**MUSIC**

MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3

**PHILOSOPHY**

PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

**RELIGION**

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (12 SHC)**

Select four courses from at least three of the following discipline areas. **At least one course must be a history course.**

**ANTHROPOLOGY**

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

## **SOCIOLOGY**

SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

## **GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

## **NATURAL SCIENCES/MATHEMATICS (16 SHC)**

*Natural Sciences (8 SHC):* A two-course sequence in general biology, general chemistry, or general physics is required. BIO 110 may be used as an elective if the sequence chosen is not Biology.

*Mathematics (8 SHC)*

## **BIOLOGY**

BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4

## **CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

## **PHYSICS**

PHY 151	College Physics I	3	2	0	0	4
PHY 152	College Physics II	3	2	0	0	4

## **MATHEMATICS**

The following courses are required.

MAT 175	Precalculus	4	0	0	0	4
MAT 175A	Precalculus Lab	0	2	0	0	1
MAT 271	Calculus I	3	2	0	0	4

**Two hours of the above credits will be applied to the Other Required Hours explained below.**

## **OTHER REQUIRED HOURS (18-20 SHC)\***

Must include a minimum of 14 SHC in mathematics and/or science and professional courses that have been approved for transfer.

**Total Semester Hours Credit:**

**64-65**

\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.



# Associate in Science

## Pre-Major: Engineering

### (A1040D)

Students entering the Pre-Engineering Associate in Science Degree Program must demonstrate competency in or complete the prerequisites required for MAT 271, Calculus I.

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (44SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (12 SHC)</b>						
Select four courses from at least three of the following discipline areas. <b>At least one course must be a literature course. (Students will not receive credit for ENG 131.)</b> Courses marked by an * are recommended.						
<b>ART</b>						
ART 111	Art Appreciation	3	0	0	0	3
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
<b>ENGLISH</b>						
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
<b>* One of the following series is recommended:</b>						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
<b>HUMANITIES</b>						
*HUM 110	Technology and Society	3	0	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3
<b>PHILOSOPHY</b>						
PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3

PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3

## RELIGION

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3

## SOCIAL/BEHAVIORAL SCIENCES (12 SHC)

Select four courses from at least three of the following discipline areas. **One history sequence is required. One economics course is required.**

### ANTHROPOLOGY

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

### ECONOMICS

**One of the following courses is required:**

ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

### HISTORY

**One of the following history sequences is required:**

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
or						
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

### POLITICAL SCIENCE

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

### PSYCHOLOGY

PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

### SOCIOLOGY

SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

### GEOGRAPHY

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3



**NATURAL SCIENCES/MATHEMATICS (16 SHC)**

*Natural Sciences (8 SHC):* **PHY 251 and PHY 252 are required.**

*Mathematics (8 SHC):* **MAT 271 and MAT 272 are required.**

**PHYSICS**

PHY 251	General Physics I	3	2	0	0	4
PHY 252	General Physics II	3	2	0	0	4

**MATHEMATICS**

MAT 271	Calculus I	3	2	0	0	4
MAT 272	Calculus II	3	2	0	0	4

**OTHER REQUIRED HOURS (18-19 SHC)\***

Must include additional general education and professional courses that have been approved for transfer.

**The following courses are required:**

CHM 151	General Chemistry I	3	3	0	0	4
MAT 273	Calculus III	3	2	0	0	4
MAT 285	Differential Equations	3	0	0	0	3
CSC 134	C++ Programming	2	3	0	0	3

**One of the following courses is required:**

CHM 152	General Chemistry II	3	3	0	0	4
DFT 170	Engineering Graphics	2	2	0	0	3

**Total Semester Hours Credit:**

**64-65**

\*Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.

# Associate in Fine Arts (ART) (A10200)

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses (28 SHC)*</b>						
<b>ENGLISH COMPOSITION (6 SHC)</b>						
Students will not receive credit for both ENG 112 and ENG 114.						
ENG 111	Expository Writing	3	0	0	0	3
ENG 112	Arg.-Based Research	3	0	0	0	3
ENG 114	Prof. Research & Report	3	0	0	0	3
<b>HUMANITIES/FINE ARTS (6 SHC)**</b>						
Select two courses from at least two of the following discipline areas. <b>At least one course must be a literature course.</b>						
<b>ART</b>						
ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
<b>COMMUNICATION</b>						
COM 231	Public Speaking	3	0	0	0	3
<b>ENGLISH</b>						
ENG 131	Intro to Literature	3	0	0	0	3
ENG 231	American Literature I	3	0	0	0	3
ENG 232	American Literature II	3	0	0	0	3
ENG 241	British Literature I	3	0	0	0	3
ENG 242	British Literature II	3	0	0	0	3
<b>FOREIGN LANGUAGES</b>						
FRE 111	Elem. French I	3	0	0	0	3
FRE 112	Elem. French II	3	0	0	0	3
GER 111	Elementary German I	3	0	0	0	3
GER 112	Elementary German II	3	0	0	0	3
SPA 111	Elem. Spanish I	3	0	0	0	3
SPA 112	Elem. Spanish II	3	0	0	0	3
SPA 211	Intermediate Spanish I	3	0	0	0	3
SPA 212	Intermediate Spanish II	3	0	0	0	3
<b>MUSIC</b>						
MUS 110	Music Appreciation	3	0	0	0	3
MUS 112	Intro. To Jazz	3	0	0	0	3
MUS 113	American Music	3	0	0	0	3
<b>PHILOSOPHY</b>						
PHI 210	History of Philosophy	3	0	0	0	3
PHI 215	Philosophical Issues	3	0	0	0	3
PHI 220	Western Philosophy I	3	0	0	0	3
PHI 221	Western Philosophy II	3	0	0	0	3
PHI 240	Intro to Ethics	3	0	0	0	3



**RELIGION**

REL 110	World Religion	3	0	0	0	3
REL 111	Eastern Religion	3	0	0	0	3
REL 112	Western Religion	3	0	0	0	3
REL 211	Intro to Old Testament	3	0	0	0	3
REL 212	Intro to New Testament	3	0	0	0	3
REL 221	Religion in America	3	0	0	0	3

**SOCIAL/BEHAVIORAL SCIENCES (9 SHC)**

Select three courses from at least three of the following discipline areas. **At least one course must be a history course.**

**ANTHROPOLOGY**

ANT 210	General Anthropology	3	0	0	0	3
ANT 220	Cultural Anthropology	3	0	0	0	3
ANT 221	Comparative Cultures	3	0	0	0	3
ANT 230	Physical Anthropology	3	0	0	0	3
ANT 240	Archaeology	3	0	0	0	3

**ECONOMICS**

Students may not receive credit for ECO 151 if they have received credit for ECO 251 or ECO 252.

ECO 151	Survey of Economics	3	0	0	0	3
ECO 251	Prin. of Microeconomics	3	0	0	0	3
ECO 252	Prin. of Macroeconomics	3	0	0	0	3

**HISTORY**

HIS 111	World Civilizations I	3	0	0	0	3
HIS 112	World Civilizations II	3	0	0	0	3
HIS 114	Comparative World History	3	0	0	0	3
HIS 131	American History I	3	0	0	0	3
HIS 132	American History II	3	0	0	0	3

**POLITICAL SCIENCE**

POL 110	Intro Political Science	3	0	0	0	3
POL 120	American Government	3	0	0	0	3
POL 210	Comparative Government	3	0	0	0	3
POL 220	International Relations	3	0	0	0	3

**PSYCHOLOGY**

PSY 150	General Psychology	3	0	0	0	3
PSY 239	Psychology of Personality	3	0	0	0	3
PSY 241	Dev. Psychology	3	0	0	0	3
PSY 281	Abnormal Psychology	3	0	0	0	3

**SOCIOLOGY**

SOC 210	Intro. To Sociology	3	0	0	0	3
SOC 213	Sociology of the Family	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3
SOC 225	Social Diversity	3	0	0	0	3
SOC 240	Social Psychology	3	0	0	0	3

**GEOGRAPHY**

GEO 111	World Geography	3	0	0	0	3
GEO 112	Cultural Geography	3	0	0	0	3
GEO 130	Gen. Physical Geography	3	0	0	0	3

**NATURAL SCIENCES/MATHEMATICS (7 SHC)**

*Natural Sciences (4 SHC):* Select one course, including accompanying laboratory work, from among the biological and physical science disciplines.

*Mathematics (3 SHC)*

**BIOLOGY**

BIO 110	Principles of Biology	3	3	0	0	4
BIO 111	General Biology I	3	3	0	0	4
BIO 112	General Biology II	3	3	0	0	4
BIO 120	Introductory Botany	3	3	0	0	4
BIO 130	Introductory Zoology	3	3	0	0	4
BIO 140	Environmental Biology	3	0	0	0	3
BIO 140A	Env. Biology Lab	0	3	0	0	1

**CHEMISTRY**

CHM 151	General Chemistry I	3	3	0	0	4
CHM 152	General Chemistry II	3	3	0	0	4

**GEOLOGY**

GEL 111	Introductory Geology	3	2	0	0	4
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**PHYSICS**

PHY 151	College Physics I	3	2	0	0	4
PHY 251	College Physics II	3	2	0	0	4

**MATHEMATICS****SELECT ONE OF THE FOLLOWING:**

MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics Lab	0	2	0	0	1
or						
MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1

**OTHER REQUIRED HOURS (36-37SHC)\***

ART 114	Art History Survey I	3	0	0	0	3
ART 115	Art History Survey II	3	0	0	0	3
ART 121	Design I	1	4	0	0	3
ART 122	Art Design II	1	4	0	0	3
ART 131	Drawing I	0	6	0	0	3

Choose 21 SHC Art Hours from other art courses not yet taken.

**ART Electives**

ART 116	Survey of American Art	3	0	0	0	3
ART 117	Non-Western Art History	3	0	0	0	3
ART 132	Drawing II	0	6	0	0	3
ART 135	Figure Drawing I	0	6	0	0	3
ART 171	Computer Art I	1	4	0	0	3
ART 172	Computer Art II	0	6	0	0	3
ART 212	Gallery Assistantship I	0	2	0	0	1
ART 213	Gallery Assistantship II	0	2	0	0	1
ART 214	Portfolio and Resume	0	2	0	0	1
ART 231	Printmaking I	0	6	0	0	3
ART 232	Printmaking II	0	6	0	0	3
ART 240	Painting I	0	6	0	0	3



ART 241	Painting II	0	6	0	0	3
ART 244	Watercolor	0	6	0	0	3
ART 247	Jewelry I	0	6	0	0	3
ART 248	Jewelry II	0	6	0	0	3
ART 261	Photography I	1	4	0	0	3
ART 262	Photography II	1	4	0	0	3
ART 271	Computer Art II	0	6	0	0	3
ART 275	Intro. To Commercial Art	0	6	0	0	3
ART 281	Sculpture I	0	6	0	0	3
ART 282	Sculpture II	0	6	0	0	3
ART 283	Ceramics I	0	6	0	0	3
ART 284	Ceramics II	0	6	0	0	3
ART 285	Ceramics III	0	6	0	0	3
ART 286	Ceramics IV	0	6	0	0	3
ART 288	Studio	0	6	0	0	3

**Total Semester Hours Credit:**

**64-65**

# Accounting

## Associate In Applied Science Degree

### (A25100)

The Accounting curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting profession. Using the language of business, accountants assemble and analyze, process, and communicate essential information about financial operations.

In addition to course work in accounting principles, theories, and practice, students will study business law, finance, management, and economics. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking, and ethics.

Graduates should qualify for entry-level accounting positions in many types of organizations, including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, an individual may advance in the accounting profession.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
		Humanities Elective*	3	0	0	0	3
		Social Science Elective	3	0	0	0	3
		Math Elective (MAT 110 or higher)	3	0	0	0	3
<b>Major Courses</b>							
ACC	120	Principles of Accounting I	3	2	0	0	4
ACC	121	Principles of Accounting II	3	2	0	0	4
ACC	129	Individual Income Taxes	2	2	0	0	3
ACC	130	Business Income Taxes	2	2	0	0	3
ACC	140	Payroll Accounting	1	2	0	0	2
ACC	149	Intro to Acc. Spreadsheets	1	2	0	0	2
ACC	151	Acc. Spreadsheet Apps.	1	2	0	0	2
ACC	220	Intermediate Accounting I	3	2	0	0	4
ACC	221	Intermediate Accounting II	3	2	0	0	4
ACC	225	Cost Accounting	3	0	0	0	3
ACC	226	Managerial Accounting	3	0	0	0	3
ACC	269	Auditing	3	0	0	0	3
BUS	115	Business Law	3	0	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
ECO	151	Survey of Economics <b>OR</b>	3	0	0	0	3
ECO	251	Microeconomics	3	0	0	0	3
<b>Electives (Select 6 hours)</b>							
<b>Any BUS prefix courses</b>							
COE	111	Work Experience I	0	0	0	10	1
COE	121	Work Experience II	0	0	0	10	1
COE	131	Work Experience III	0	0	0	10	1
COE	112	Work Experience I	0	0	0	20	2
COE	122	Work Experience II	0	0	0	20	2
COE	132	Work Experience III	0	0	0	20	2

Total Semester Hours Credit:

67

\*Humanities Elective: ART,ENG, FRE, MUS, PHI, REL, SPA, and HUM.



# Architectural Technology

## Associate In Applied Science Degree

### (A40100)

The Architectural Technology curriculum prepares individuals with knowledge and skills that can lead to employment in the field of architecture or one of the associated professions.

Students receive instruction in construction document preparation, materials and methods, environmental and structural systems, building codes and specifications, and computer applications. They also complete a design project. Optional courses may be provided to suit specific career needs.

Upon completion, graduates have career opportunities within the architectural, engineering, and construction professions, as well as in industry and government. At participating universities, graduates may continue their education toward a bachelors degree in related fields.

			Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>								
ENG	111		Expository Writing	3	0	0	0	3
ENG	114		Oral Communications	3	0	0	0	3
			Humanities Elective	3	0	0	0	3
			Social Science Elective	3	0	0	0	3
MAT	121		Algebra & Trigonometry	2	2	0	0	3
<b>Major Courses</b>								
ARC	111		Intro to Arch Technology	1	6	0	0	3
ARC	112		Constr Materials/Methods	3	2	0	0	4
ARC	113		Residential Arch Tech	1	6	0	0	3
ARC	114		Architectural CAD	1	3	0	0	2
ARC	131		Building Codes/Laws	2	2	0	0	3
ARC	141		Elm Structures for Arch	4	0	0	0	4
ARC	211		Light Construction Tech	1	6	0	0	3
ARC	213		Design Project 2	6	0	0	4	
ARC	220		Advanced Arch CAD	1	3	0	0	2
ARC	221		Architectural 3D CAD	1	4	0	0	3
ARC	230		Environmental Systems	3	3	0	0	4
CSC	129		Technical Programming	2	3	0	0	3
ERG	115		Intro to Technology	2	6	0	0	4
SRV	110		Surveying I	2	6	0	0	4
SRV	111		Surveying III	2	6	0	0	4
<b>*Select 3 SHC from the following courses:</b>								
ARC	119		Structural Drafting	2	2	0	0	3
ARC	263		Intro to ADA Title III	1	2	0	0	2
BPR	130		Blueprint Read/Construction	1	2	0	0	2
COE	111		Co-Op Work Experience	0	10	0	0	1
COE	112		Co-op Work Experience II	0	20	0	0	2
COE	121		Co-Op Work Experience I	0	10	0	0	1
COE	125		Co-Op Work Experience II	0	10	0	0	1
COE	113		Co-Op Work Experience III	0	30	0	0	3
COE	121		Co-Op Work Experience II	0	20	0	0	2
Total Semester Hours Credit								68

See your academic advisor or division dean for appropriate selection of humanities/ social science elective.

Automotive Systems Technology  
Associate in Applied Science  
(A60160)

The Automotive Systems Technology curriculum prepares individuals for employment as Automotive Service Technicians. It provides an introduction to automotive careers and increase student awareness of the challenges associated with this fast and ever-changing field.

Classroom and lab experiences integrate technical and academic course work. Emphasis is placed on theory, servicing, and operation of brakes, electrical/electronic systems, engine performance, steering, suspension, automatic transmission/trans axles, engine repair, climate control, and manual drive-trains.

Upon completion of this curriculum, students should be prepared to take the ASE exam, and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

Title			Class	Lab	Work	Credit
General Education Courses						
ACA	118	College Study Skills	2	0	0	2
MAT	120	Geometry and Trigonometry	2	2	0	3
ENG	111	Expository Writing	3	0	0	3
ENG	114	Professional Research & Report	3	0	0	3
		Humanities	3	0	0	3
		Social Science	3	0	0	3
MAJOR COURSES						
AUT	141	Suspension and Steering Systems	2	4	0	4
AUT	151	Brake Systems	2	2	0	3
AUT	161	Electrical Systems	2	6	0	4
AUT	181	Engine Performance-Electrical	2	3	0	3
AUT	183	Engine Performance-Fuels	2	3	0	3
AUT	185	Emission Controls	1	2	0	2
AUT	110	Intro to Auto Technology	2	2	0	3
AUT	115	Engine Fundamentals	2	3	0	3
AUT	116	Engine Repair	2	3	0	2
AUT	152	Brake Systems Lab	0	2	0	1
AUT	164	Automotive Electronics	2	2	0	3
AUT	171	Heating and Air Conditioning	2	3	0	3
AUT	182	Engine Performance-Electrical Lab	0	3	0	1
AUT	184	Engine Performance Fuels-Lab	0	3	0	1
AUT	186	Automotive Computer Applications	1	2	0	2
AUT	221	Automatic Transmissions	2	6	0	4
AUT	231	Manual Drive Trains/Axles	2	3	0	3
AUT	232	Manual Drive Trains/Axles Lab	0	3	0	1
WLD	112	Basic Welding Processes	1	3	0	2
Select 4 hours from the following:						
AUT	113	Automotive Servicing	2	6	0	4
COE	112	Co-Op Experience I	0	20	0	2
COE	122	Co-Op Experience II	0	20	0	2
AUT	283	Advanced Electronic Diagnosis	1	2	0	2

Total Hours Credit 69



# Biomedical Equipment Technology

(Collaborative Program with Caldwell Community College and Technical Institute)

## Associate In Applied Science Degree

(A50100)

The Biomedical Equipment Technology curriculum prepares individuals to install, operate, troubleshoot, and repair sophisticated devices and instrumentation used in the health care delivery system. Emphasis is placed on preventive and safety inspections to ensure biomedical equipment meet local and national safety standards.

Course work provides a strong foundation in mathematics, physics, electronics, chemistry, anatomy, physiology, and troubleshooting techniques. People skills are very important, as well as the ability to communicate both in written and oral form.

A biomedical equipment technician is a problem solver. Graduates should qualify for employment opportunities in hospitals, clinics, clinical laboratories, shared service organizations and manufacturers' field service. With an A.A.S. degree and two years experience, individuals should be able to become a certified Biomedical Equipment Technician.

### Special Admission Requirements

- Health form after acceptance
- Current certification in CPR after acceptance

	Title	Class	Lab	Credits
<b>General Education Courses</b>				
*COM 120	Interpersonal Communication	3	0	3
*ENG 111	Expository Writing	3	0	3
*ENG 111A	Expository Writing Lab	0	2	1
*ENG 114	Professional Research & Reporting			
or				
ENG 113	Literature-Based Research	3	0	3
*Humanities/Fine Arts Elective		3	0	3
*Social Science Elective		3	0	3
*MAT 121	Algebra/Trigonometry I	2	2	3
<b>Major Courses</b>				
BMT 111	Introduction to Biomedical Field	1	0	1
BMT 112	Hospital Safety Standards	2	2	3
BMT 113	Medical Electronics	3	6	5
BMT 120	Anatomy & Physiology	2	2	3
BMT 211	Biomedical Measurements	2	2	3
BMT 212	BMET Instrumentation I	3	6	5
BMT 213	BMET Instrumentation II	2	3	3
BMT 222	Imaging Techniques	3	0	3
BMT 224	Biomedical Laser/Fiber Optics	3	3	4
*CIS 110	Introduction to Computers	2	2	3
**COE 112	Coop Work Experience I	0	20	2
COE 115	Work Experience Seminar I	1	0	1
*ELC 112	DC/AC Electricity	3	6	5
*ELN 133	Digital Electronics	3	3	4
*ELN 237	Local Area Networks	2	3	3
*ELN 232	Introduction to Microprocessors	3	3	4

Total Semester Hours Credits

71

\*Courses that are available at Gaston College

\*\*Upon approval by academic advisor and division dean, cooperative education experience may be substituted for selected courses. Consult the division dean for details.

# Business Administration

## Associate In Applied Science Degree

### (A25120)

The Business Administration curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions and processes and an understanding of business organizations in today’s global economy.

Course work includes business concepts, such as accounting, business law, economics, management, and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building, and decision making.

Through these skills, students will have a sound business education base for life-long learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and business and industry.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
		Humanities Elective*	3	0	0	0	3
		Social Science Elective	3	0	0	0	3
		Math Elective (MAT 110 or higher)	3	0	0	0	3
<b>Major Courses</b>							
ACC	120	Principles of Accounting I	3	2	0	0	4
ACC	121	Principles of Accounting II	3	2	0	0	4
ACC	149	Intro to Acc. Sprdsht <b>OR</b>	1	2	0	0	2
CIS	120	Introduction to Spreadsheets	2	2	0	0	3
ACC	226	Managerial Accounting	3	0	0	0	3
BUS	110	Introduction to Business	3	0	0	0	3
BUS	115	Business Law I	3	0	0	0	3
BUS	116	Business Law II	3	0	0	0	3
BUS	121	Business Math	2	2	0	0	3
BUS	125	Personal Finance	3	0	0	0	3
BUS	137	Principles of Management	3	0	0	0	3
BUS	210	Investment Analysis	3	0	0	0	3
BUS	225	Business Finance	2	2	0	0	3
BUS	239	Business Apps. Seminar	1	2	0	0	2
BUS	255	Org Behavior in Business	3	0	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
ECO	151	Survey of Economics <b>OR</b>	3	0	0	0	3
ECO	251	Microeconomics	3	0	0	0	3
MKT	120	Principles of Marketing	3	0	0	0	3
<b>Electives (Select 6 hours)</b>							
ACC	129	Individual Income Taxes	2	2	0	0	3
BUS	217	Employment Law & Regs	3	0	0	0	3
BUS	228	Business Statistics	2	2	0	0	3
BUS	230	Small Business Mgt.	3	0	0	0	3
CIS	172	Intro to the Internet	2	3	0	0	3



MKT	220	Advertising & Sales Pro.	3	0	0	0	3
MKT	223	Customer Service	3	0	0	0	3
COE	111	Work Experience I	0	0	0	10	1
COE	112	Work Experience I	0	0	0	20	2

Total Semester Hours Credit:							72
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\*Humanities Elective: ART, ENG, FRE, MUS, PHI, REL, SPA, and HUM.

# Business Administration

## Electronic Commerce Concentration

### Associate in Applied Science Degree

#### (A2512I)

Electronic Commerce is a concentration under the title of Business Administration. This curriculum is designed to prepare individuals for a career in the Internet economy.

Course work includes topics related to electronic business, Internet strategy in business, and basic business principles in the world of E-Commerce. Students will be able to demonstrate the ability to identify and analyze such functional issues as planning, technical systems, marketing, security, finance, law, design, implementation, assessment, and policy issues at an entry level.

Graduates from this program will have a sound business educational base for life-long learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and small to medium size businesses or industry.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ECO	251	Principles of Microeconomics	3	0	0	0	3
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Professional Research and Reporting	3	0	0	0	3
MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1
		Humanities Elective*	3	0	0	0	3
<b>Major Hours</b>							
ACC	120	Principles of Accounting I	3	2	0	0	4
BUS	115	Business Law I	3	0	0	0	3
BUS	137	Principles of Management	3	0	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
CIS	115	Introduction to Programming	2	2	0	0	3
CIS	152	Database Concepts and Applications	2	2	0	0	3
CIS	172	Introduction to the Internet	2	3	0	0	3
CSC	160	Introduction to Internet Programming	2	2	0	0	3
ECM	168	Electronic Business	2	2	0	0	3
ECM	210	Introduction to E-Commerce	2	2	0	0	3
ECM	220	E-Commerce Planning & Implementation	2	2	0	0	3
ECM	225	Electronic Marketing**	2	2	0	0	3
ECM	230	Capstone Project	2	2	0	0	3
ECO	252	Principles of Macroeconomics	3	0	0	0	3
ITN	140	Web Development Tools	2	2	0	0	3
ITN	160	Principles of Web Design	2	2	0	0	3
MKT	120	Principles of Marketing	3	0	0	0	3
MKT	220	Advertising and Sales Promotion	3	0	0	0	3

Total Semester Hours Credit:

71

\*Humanities Elective: ART, ENG, FRE, MUS, PHI, REL, SPA, and HUM.

\*\*Pending NCCCS approval



**Business Administration  
Human Resources Management Concentration  
Associate of Applied Science Degree  
(A2512C)**

Human Resources Management is a concentration under the curriculum title of Business Administration. The curriculum is designed to meet the demands of business and service agencies. The objective is the development of generalists and specialists in the administration, training, and management of human resources.

Course work includes studies in management, interviewing, placement, needs assessment, planning, compensation and benefits, and training techniques. Also included are topics such as people skills, learning approaches, skills building, and development of instructional and training materials.

Graduates from this program will have a sound business educational base for life-long learning. Students will be prepared for employment opportunities in personnel, training, and other human resources development areas.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ECO	251	Principles of Microeconomics	3	0	0	0	3
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Professional Research and Reporting	3	0	0	0	3
MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1
		Humanities Elective*	3	0	0	0	3
<b>Major Hours</b>							
ACC	120	Principles of Accounting I	3	2	0	0	4
BAF	143	Financial Planning	3	0	0	0	3
BUS	115	Business Law I	3	0	0	0	3
BUS	116	Business Law II	3	0	0	0	3
BUS	137	Principles of Management	3	0	0	0	3
BUS	217	Employment Law and Regulations	3	0	0	0	2
BUS	234	Training and Development	3	0	0	0	3
BUS	235	Performance Management	3	0	0	0	3
BUS	239	Business Applications Seminar	1	2	0	0	3
BUS	255	Organizational Behavior in Business	3	0	0	0	3
BUS	256	Recruitment, Selection, and Per Plan	3	0	0	0	3
BUS	258	Compensation and Benefits	3	0	0	0	3
BUS	259	HRM Applications	3	0	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
CIS	152	Database Concepts and Applications	2	2	0	0	3
CIS	172	Introduction to the Internet	2	3	0	0	3
ECO	252	Principles of Macroeconomics	3	0	0	0	3
MKT	120	Principles of Marketing	3	0	0	0	3

Total Semester Hours Credit:

70

\*Humanities Elective: ART, ENG, FRE, MUS, PHI, REL, SPA, and HUM.

# Business Administration

## International Business Concentration

### Associate of Applied Science Degree (A2512D)

International Business is a concentration under the curriculum title of Business Administration. This curriculum prepares individuals for positions in international business through studies in business, social science, foreign language, and specialized courses in international marketing, law, economics, and trade practices.

Students will be expected to demonstrate language skills; a knowledge of geographic, political, and cultural differences; the ability to process import/export documentation; and a knowledge of international economics and business practices.

Employment opportunities are available in import/export departments, freight forwarder companies, customs house brokerage firms, international banking, state and federal government organizations, world organizations, and other internationally active businesses.

			Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>								
ECO	251		Principles of Microeconomics	3	0	0	0	3
ENG	111		Expository Writing	3	0	0	0	3
ENG	114		Professional Research and Reporting	3	0	0	0	3
MAT	161		College Algebra	3	0	0	0	3
MAT	161A		College Algebra Lab	0	2	0	0	1
SPA	111		Elementary Spanish I	3	0	0	0	3
<b>Major Hours</b>								
ACC	120		Principles of Accounting I	3	2	0	0	4
ACC	270		International Accounting	3	0	0	0	3
BAF	246		International Banking	3	0	0	0	3
BUS	115		Business Law I	3	0	0	0	3
BUS	116		Business Law II	3	0	0	0	3
BUS	137		Principles of Management	3	0	0	0	3
BUS	225		Business Finance	2	2	0	0	3
BUS	239		Business Applications Seminar	1	2	0	0	2
CIS	110		Introduction to Computers	2	2	0	0	3
ECO	252		Principles of Macroeconomics	3	0	0	0	3
INT	110		International Business	3	0	0	0	3
INT	115		Global Communications	2	0	0	0	2
INT	210		International Trade	3	0	0	0	3
INT	220		International Economics	3	0	0	0	3
INT	230		International Law	3	0	0	0	3
LOG	110		Introduction to Logistics	3	0	0	0	3
MKT	120		Principles of Marketing	3	0	0	0	3
MKT	224		International Marketing	3	0	0	0	3
SPA	112		Elementary Spanish II	3	0	0	0	3

Total Semester Hours

72



# Business Administration

## Logistics Management Concentration

### Associate of Applied Science

#### (A2512E)

Logistics Management is a concentration under the curriculum title of Business Administration. This curriculum prepares students for careers in transportation and warehousing through the study of the principles of organization and management in logistics.

Course work includes the international and domestic movement of goods from the raw materials source(s) through production and ultimately to the consumer. Courses in transportation, warehousing, inventory control, material handling, computerization, and federal transportation and OSHA regulations are emphasized.

Graduates should qualify for employment in logistics-related jobs such as material handling foreman, transportation supervisor, traffic manager, warehouse manager, and inventory control manager.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ECO	251	Principles of Microeconomics	3	0	0	0	3
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Professional Research and Reporting	3	0	0	0	3
MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1
		Humanities Elective*	3	0	0	0	3
<b>Major Hours</b>							
ACC	120	Principles of Accounting I	3	2	0	0	4
ACC	121	Principles of Accounting II	3	2	0	0	4
ACC	149	Introduction to Accounting Spreadsheets	1	2	0	0	2
BUS	115	Business Law I	3	0	0	0	3
BUS	116	Business Law II	3	0	0	0	3
BUS	137	Principles of Management	3	0	0	0	3
BUS	220	Purchasing	3	0	0	0	3
BUS	225	Business Finance	2	2	0	0	3
BUS	231	Computerized Inventory	2	2	0	0	3
BUS	239	Business Applications Seminar	1	2	0	0	2
CIS	110	Introduction to Computers	2	2	0	0	3
ECO	252	Principles of Macroeconomics	3	0	0	0	3
LOG	110	Introduction to Logistics	3	0	0	0	3
LOG	120	Global Logistics	3	0	0	0	3
LOG	210	Fleet Management	3	0	0	0	3
LOG	220	Logistics Management	3	0	0	0	3
LOG	230	Transportation Management	3	0	0	0	3
MKT	120	Principles of Marketing	3	0	0	0	3
<b>Electives (Select 3 hours)</b>							
BUS	228	Business Statistics	2	2	0	0	3
CIS	172	Introduction to the Internet	2	3	0	0	3
INT	110	International Business	3	0	0	0	3
MKT	224	International Marketing	3	0	0	0	3

Total Semester Hours

73

\*Humanities Elective: ART, ENG, FRE, MUS, PHI, REL, SPA, and HUM.

Civil Engineering Technology  
Associate In Applied Science Degree  
(A40140)

The Civil Engineering Technology curriculum provides the application of relevant theory of engineering needed by technicians to carry out planning and supervisory tasks in the construction of transportation systems, residential and commercial buildings, bridges, dams, and water and wastewater treatment systems.

Coursework includes the communication and computational skills required to support the fields such as materials testing, structures, estimating, project management, hydraulics, environmental technology, and surveying. Additional coursework will cover the operation of computers and application software, including computer-aided drafting.

Graduates should qualify for technician level jobs with both public and private engineering, construction, and surveying agencies.

This curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202 -- Telephone (410) 347-7700.

This program can be completed using a day sequence.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
		Humanities/Fine Arts Elective	3	0	0	0	3
		Social/Behavioral Science Elective	3	0	0	0	3
<b>Major Courses</b>							
CIS	111	Basic PC Literacy	1	2	0	0	2
CIV	110	Statics/Strength of Mtls	2	6	0	0	4
CIV	111	Soils & Foundations	2	3	0	0	3
CIV	125	Civil/Surveying CAD	1	6	0	0	3
CIV	210	Engineering Materials	1	3	0	0	2
CIV	211	Hydraulics & Hydrology	2	3	0	0	3
CIV	221	Steel and Timber Design	2	3	0	0	3
CIV	230	Construction Estimating	2	3	0	0	3
CIV	240	Project Management	2	3	0	0	3
CIV	250	Civil Eng Tech Project	1	3	0	0	2
EGR	115	Intro to Technology	2	6	0	0	4
MAT	122	Algebra/Trigonometry II	2	2	0	0	3
MAT	223	Applied Calculus	2	2	0	0	3
PHY	131	Physics-Mechanics	3	2	0	0	4
PHY	132	Physics-Elec & Magnetism	3	2	0	0	4
SRV	110	Surveying I	2	6	0	0	4
SRV	111	Surveying II	2	6	0	0	4



**Electives (Select 7 SHC)**

CIV	212	Environmental Planning	2	3	0	0	3
CIV	215	Highway Technology	1	3	0	0	2
CIV	220	Basic Structural Concepts	1	3	0	0	2
CIV	222	Reinforced Concrete	2	3	0	0	3
EGR	130	Engineering Cost Control	2	2	0	0	3
SRV	210	Surveying III	2	6	0	0	4
SRV	220	Surveying Law	2	2	0	0	3
SRV	230	Subdivision Planning	1	6	0	0	3
SRV	240	Topo/Site Surveying	2	6	0	0	4
SRV	250	Advanced Surveying	2	6	0	0	4
SRV	260	Field & Office Practices	1	3	0	0	2
COE	111	Co-op Work Exp I	0	0	0	10	1
COE	121	Co-op Work Exp II	0	0	0	10	1
COE	131	Co-op Work Exp III	0	0	0	10	1
COE	211	Co-op Work Exp IV	0	0	0	10	1
COE	112	Co-op Work Exp I	0	0	0	20	2
COE	122	Co-op Work Exp II	0	0	0	20	2
COE	113	Co-op Work Exp I	0	0	0	30	3

Total Semester Hour Credits:

76

Not more than 4 SHCs may be taken in COE.

See your academic advisor or division dean for appropriate selection of humanities/fine arts elective and social/behavioral science elective.

# Computer Programming

## Associate In Applied Science Degree

### (A25130)

The Computer Programming curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations.

Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve.

Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, software developers, computer operators, systems technicians, database specialists, computer specialists, software specialists, or information systems managers.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
		Humanities Elective*	3	0	0	0	3
ECO	151	Survey of Economics	3	0	0	0	3
MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1
<b>Major Courses</b>							
ACC	120	Prin of Accounting I	3	2	0	0	4
BUS.	110	Introduction to Business	3	0	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
CIS	115	Intro to Prog. & Logic	2	2	0	0	3
CIS	130	Survey of Operating Sys.	2	3	0	0	3
CIS	152	Database Concepts & Apps	2	2	0	0	3
CIS	286	Systems Analysis & Design	3	0	0	0	3
CIS	288	Systems Project	1	4	0	0	3
CSC	134	C++ Programming	2	3	0	0	3
CSC	135	COBOL Programming	2	3	0	0	3
CSC	138	RPG Programming	2	3	0	0	3
CSC	139	Visual Basic Programming	2	3	0	0	3
CSC	235	Advanced COBOL	2	3	0	0	3
CSC	238	Advanced RPG	2	3	0	0	3
NET	110	Data Comm/Networking	2	2	0	0	3
<b>CSC Programming Electives (Select 6 hours)</b>							
CSC	141	Visual C++ Prog.	2	3	0	0	3
CSC	148	Java Programming	2	3	0	0	3
CSC	239	Advanced Visual Basic	2	3	0	0	3
CSC	241	Advanced Visual C++	2	3	0	0	3



**Operating System Electives (Select 3 hours)**

CIS	147	Operating Sys/Windows	2	2	0	0	3
CIS	148	Operating Sys/Windows NT	2	2	0	0	3
CIS	211	AS/400 Maint. & Operations	2	3	0	0	3
CIS	246	Operating System-UNIX	2	3	0	0	3

**General CIS/CSC Electives (Select 3 hours)**

CIS	153	Database Applications	2	2	0	0	3
CIS	211	AS/400 Maint. & Operations	2	3	0	0	3
CIS	215	Hardware Install/Maint.	2	3	0	0	3
CIS	246	Operating System-UNIX	2	3	0	0	3
CSC	141	Visual C++ Prog.	2	3	0	0	3
CSC	148	Java Programming	2	3	0	0	3
CSC	239	Advanced Visual Basic	2	3	0	0	3
CSC	241	Advanced Visual C++	2	3	0	0	3
COE	111	Coop Work Experience I	0	0	0	10	1
COE	112	Coop Work Experience I	0	0	0	20	2
COE	113	Coop Work Experience I	0	0	0	30	3
COE	121	Coop Work Experience II	0	0	0	10	1
COE	122	Coop Work Experience II	0	0	0	20	2
COE	132	Coop Work Experience III	0	0	0	20	2

Total Semester Hours Credit:

74

\*Humanities Elective: ART, ENG, FRE, PHI, MUS, REL, SPA, and HUM.

Course credits earned in the Major Courses or Electives over five years ago will not apply toward the Associate of Applied Science degree in Computer Programming.

# Criminal Justice Technology

## Associate in Criminal Justice Technology

### (A55180)

The Criminal Justice Technology curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security services. The criminal justice system’s role within society will be explored.

Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENGLISH (3HSC)							
ENG	111	Expository Writing	3	0	0	0	3
<b>Select one from the following courses:</b>							
ENG	112	Arg. Based Research	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
<b>Select one of the following:</b>							
MAT	115	Mathematical Models	2	2	0	0	3
Or							
MAT	151	Statistics I	3	0	0	0	3
MAT	151A	Statistics I Lab	0	2	0	0	1
Or							
MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1
<b>Select 6.0 hours from the Social/Behavioral Sciences:</b>							
ANT	210	Anthropology	3	0	0	0	3
HIS	111	World Civilization I	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
POL	110	Intro Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	130	State & Local Government	3	0	0	0	3
PSY	150	General Psychology	3	0	0	0	3
SOC	210	Introduction to Sociology	3	0	0	0	3
GEO	111	World Reg. Geography	3	0	0	0	3



**Select 3.0 hours from the Humanities/Fine Arts:**

ART	111	Art Appreciation	3	0	0	0	3
MUS	110	Music Appreciation	3	0	0	0	3
ENG	131	Intro to Literature	3	0	0	0	3
ENG	231	American Literature I	3	0	0	0	3
FRE	111	Elementary French I	3	0	0	0	3
SPA	111	Elementary Spanish I	3	0	0	0	3
PHI	210	History of Philosophy	3	0	0	0	3
REL	110	World Religion	3	0	0	0	3
REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Test.	3	0	0	0	3
REL	212	Intro to New Test.	3	0	0	0	3
HUM	115	Critical Thinking	3	0	0	0	3

**MAJOR COURSES**

CJC	111	Intro to Criminal Justice	3	0	0	0	3
CJC	112	Criminology	3	0	0	0	3
CJC	113	Juvenile Justice	3	0	0	0	3
CJC	131	Criminal Law	3	0	0	0	3
CJC	212	Ethics & Comm Relations	3	0	0	0	3
CJC	221	Investigative Principles	3	2	0	0	4
CJC	231	Constitutional Law	3	0	0	0	3

**Select 12 SHC from the following courses:**

CJC	114	Investigative Photography	1	2	0	0	2
CJC	120	Interviews/Interrogations	1	2	0	0	2
CJC	121	Law Enforcement Oper.	3	0	0	0	3
CJC	122	Community Policing	3	0	0	0	3
CJC	132	Court Procedure & Evid.	3	0	0	0	3
CJC	141	Corrections	3	0	0	0	3
CJC	211	Counseling	3	0	0	0	3
CJC	215	Organization & Admin.	3	0	0	0	3
CJC	222	Criminalistics	3	0	0	0	3
CJC	225	Crisis Intervention	3	0	0	0	3
CJC	232	Civil Liability	3	0	0	0	3
CJC	233	Correctional Law	3	0	0	0	3

**ELECTIVES**

**Select 15.0 SHC from the following courses, one of which must be a computer course:** (In no event may a student take more than 8 hours of COE).

CIS	110	Intro. To Computers	2	2	0	0	3
CIS	111	Basic PC Literacy	1	2	0	0	2
CJC	151	Intro to Loss Prevention	3	0	0	0	3
CJC	198	Sem. In Issues in CJ	3	0	0	0	3
CJC	213	Substance Abuse	3	0	0	0	3
CJC	214	Victimology	3	0	0	0	3
CJC	223	Organized Crime	3	0	0	0	3
CJC	241	Community-Based Corr.	3	0	0	0	3
COE	111	Co-op Work Exp. I	0	0	0	10	1
COE	112	Co-op Work Exp. I	0	0	0	20	2
COE	113	Co-op Work Exp. I	0	0	0	30	3
COE	114	Co-op Work Exp. I	0	0	0	40	4
COE	121	Co-op Work Exp. II	0	0	0	10	1

COE 122	Co-op Work Exp. II	0	0	0	20	2
COE 123	Co-op Work Exp. II	0	0	0	30	3
COE 124	Co-op Work Exp. II	0	0	0	40	4
COE 131	Co-op Work Exp. III	0	0	0	10	1
COE 132	Co-op Work Exp. III	0	0	0	20	2
COE 133	Co-op Work Exp. III	0	0	0	30	3
COE 134	Co-op Work Exp. III	0	0	0	40	4
COE 211	Co-op Work Exp. IV	0	0	0	10	1
COE 212	Co-op Work Exp. IV	0	0	0	20	2
COE 213	Co-op Work Exp. IV	0	0	0	30	3
COE 214	Co-op Work Exp. IV	0	0	0	40	4
PSY 183	Psychology of Addiction	3	0	0	0	3
SOC 220	Social Problems	3	0	0	0	3

**Total Semester Hours Credit:**

**67-68**



## **Dietetic Technician Associate in Applied Science Degree (A45310)**

The Dietetic Technician Program prepares individuals to promote optimal health through proper nutrition by providing personalized services to meet client's needs, and ensure balanced diets. Dietetic Technicians work under the supervision of a registered licensed dietitian.

Course work includes content related to food, nutrition, communication, and management. The physical, biological, behavioral and social sciences support these areas.

Employment opportunities include childcare centers, hospitals, correctional centers, public health agencies, retirement centers, hospices, clinics, nursing homes, home care programs or medical offices. Graduates of the Dietetic Technician program will be eligible to become Active Members of the American Dietetic Association and to write the Registration Examination for Dietetic Technicians.

### **ADMISSION INFORMATION**

Students applying for admission to the Gaston College Dietetic Technician program **MUST** meet the following requirements for **GENERAL ADMISSION** to the college:

1. Complete general admission application.
2. Completion of ASSET. Individuals who have earned a "C" or better in both college-level Math and English courses from a regionally accredited institution shall have the test waived. The ASSET test may be waived of any person who has scored 520 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT.
3. Submit official transcript of high school grades with graduation date OR GED scores.
4. Submit official college transcript(s), when applicable.
5. Applicants from countries whose language is not English must demonstrate proficiency in the English language by scoring no less than 540 on the Test of English as a Foreign Language (TOEFL).

### **ADDITIONAL REQUIREMENTS TO BE ELIGIBLE TO SUBMIT AN APPLICATION TO THE DIETETIC TECHNICIAN PROGRAM:**

1. Must have an overall grade point average of 2.0 or better in required college courses.
2. Must have grades of "C" or better in all related courses.
3. Must have completed the required Biology and Chemistry courses within 5 years from the date of application to the program.
4. Must submit a satisfactory "Criminal Record Check" or notarized statement stating no record exists from the Clerk of Superior Court at the county court house in his/her county of residence. If there have been allegations of a misdemeanor(s) or felony(s) lodged against the applicant s/he must present a notarized "Criminal Record Check" from the county in which the allegations were made.
5. Current CPR Certification.

The following criteria will be utilized by the Admissions Committee in the selection process of recommending applicants for admission to the program:

- 1. The number of related courses completed by end of the fall semester prior to making application.
- 2. Grade Point Average (GPA) in related courses.

The selection of applicants into the Program is based on the above criteria. The final selection of applicants into the program is made by the Department Chairman in consultation with the Dean of Health and Business.

A completed health form documenting satisfactory emotional and physical health is required before entering the Dietetic Technician program.

**DIETETIC TECHNICIAN**

	Title	Class	Lab	Clinical	Credit
First Semester					
DET 110	Dietetic Technician I	6	0	6	8
BIO 163	Basic Anatomy & Physiology	4	2	0	5
ENG 111	Expository Writing	3	0	0	3
PSY 150	General Psychology	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
	Semester Total	16	2	6	19
Second Semester					
DET 120	Dietetic Technician III	6	0	9	9
CHM 130	Gen. Org. & Biochemistry	3	2	0	4
and					
CHM 130A	Gen. Org. & Biochemistry Lab				
DET 115	Dietetic Technician II	2	0	0	2
MAT 100+		<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
	Semester Total	14	2	9	18
Third Semester					
DET 210	Dietetic Technician IV	6	0	9	9
BIO 275	Microbiology	3	3	0	4
PSY 241	Developmental Psychology	3	0	0	3
ENG 114	Professional Research & Reporting	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
	Semester Total	15	3	9	19
Fourth Semester					
DET 220	Dietetic Technician V	6	0	12	10
COE 111	Co-op Work Experience I	0	0	10	1
DET 225	Dietetic Technician VI	2	0	0	2
Humanities		<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
	Semester Total	11	0	22	16
Total semester hours credit:					72



## Early Childhood Associate

### Associate in Early Childhood (A55220)

The Early Childhood Associate curriculum prepares individuals to work with children from infancy through middle childhood in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with parents and children. Students will foster the cognitive/language, physical/motor, social/emotional and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school age programs.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
Students must take either ENG 112 or ENG 114. Credit will not be given for both ENG 112 and ENG 114.							
ENG	111	Expository Writing	3	0	0	0	3
ENG	112	Argument Based Research	3	0	0	0	3
<b>Or</b>							
ENG	114	Prof. Research & Report	3	0	0	0	3
SPA	111	Elementary Spanish I	3	0	0	0	3
PSY	150	General Psychology	3	0	0	0	3
MAT	140	Survey of Mathematics	3	0	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
HEA	110	Personal Health/Wellness	3	0	0	0	3
<b>Major Courses</b>							
COE	111	Co-op Work Experience I	0	0	0	10	1
COE	115	Seminar in Observation	1	0	0	0	1
COE	122	Co-op Work Exp. II	0	0	0	20	2
COE	125	Work Experience II	0	0	0	20	1
<b>Choose either:</b>							
EDU	119	Early Childhood Education	3	2	0	0	4
Or choose a set of EDU 111 and EDU 112 or EDU 111 and EDU 113.							
EDU	111	Early Childhood Cred. I	2	0	0	0	2
EDU	112	Early Childhood Cred. II	2	0	0	0	2
<b>Or</b>							
EDU	113	Family/Early Child Cred.	2	0	0	0	2
EDU	131	Child, Family, and Comm.	3	0	0	0	3
EDU	144	Child Development I	3	0	0	0	3
EDU	145	Child Development II	3	0	0	0	3
EDU	146	Child Guidance	3	0	0	0	3
EDU	153	Health, Safety, & Nutrit.	3	0	0	0	3

EDU	155	Art & Drama for Children	1	2	0	0	2
EDU	157	Active Play	2	2	0	0	3
EDU	185	Cognitive & Lang. Act.	3	0	0	0	3
EDU	185A	Cog. & Lang. Act Lab	0	2	0	0	1
<b>OR</b>							
EDU	259	Curriculum Planning	3	0	0	0	3
EDU	221	Children with Sp. Needs	3	0	0	0	3
EDU	252	Math & Sci. Activities	3	0	0	0	3
EDU	252A	Math & Sci. Act Lab	0	2	0	0	1
EDU	261	Early Childhood Admin I	2	0	0	0	2
EDU	280	Literacy Experiences	3	0	0	0	3
EDU	282	Early Childhood Lit.	3	0	0	0	3
EDU	288	Advanced Issues	2	0	0	0	2

**Select one of the following:**

EDU	234	Infants, Toddlers, & Twos	3	0	0	0	3
EDU	235	Sch.-Age Dev & Program	2	0	0	0	2
EDU	262	Early Childhood Admin II	3	0	0	0	3

Total Semester Hours Credit:

73-74



# Electronics Engineering Technology Associate In Applied Science Degree (A40200)

The Electronics Engineering Technology curriculum prepares individuals to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems, such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems.

A broad-based core of courses, including basic electricity, solid-state fundamentals, digital concepts, and microprocessors, ensures the student will develop the skills necessary to perform entry-level tasks. Emphasis is placed on developing the student's ability to analyze and troubleshoot electronic systems.

Graduates should qualify for employment as engineering assistants or electronic technicians with job titles such as electronics engineering technician, field service technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

This curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202 -- Telephone (410) 347-7700.

This program can be completed using either a day or evening sequence.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
		Humanities/ Fine Arts Elective	3	0	0	0	3
		Social/Behavioral Science Elective	3	0	0	0	3
<b>Major Courses</b>							
EGR	115	Intro to Technology	2	6	0	0	4
EGR	285	Design Project	0	4	0	0	2
ELC	131	DC/AC Circuit Analysis	4	3	0	0	5
ELC	133	Adv Circuit Analysis	2	3	0	0	3
ELN	131	Electronic Devices	3	3	0	0	4
ELN	132	Linear IC Applications	3	3	0	0	4
ELN	133	Digital Electronics	3	3	0	0	4
ELN	150	CAD for Electronics	1	3	0	0	2
ELN	154	Intro to Data Comm	2	3	0	0	3
ELN	232	Intro to Microprocessors	3	3	0	0	4
ELN	233	Microprocessor Systems	3	3	0	0	4
ELN	244	Computer Repair	3	6	0	0	5
MAT	122	Algebra/Trigonometry II	2	2	0	0	3
MAT	223	Applied Calculus	2	2	0	0	3

PHY	131	Physics-Mechanics	3	2	0	0	4
PHY	132	Physics-Elec. & Magnetism	3	2	0	0	4

**Electives (Select 3 shc)**

CIS	110	Intro to Computers	2	2	0	0	3
CSC	129	Technical Programming	2	3	0	0	3
ELC	128	Introduction to PLC	2	3	0	0	3
ELC	228	PLC Applications	2	6	0	0	4
ELC	231	Electric Power Systems	3	2	0	0	4
ELN	229	Industrial Electronics	2	4	0	0	4
ELN	234	Communications Systems	3	3	0	0	4
ELN	235	Data Comm Systems	3	3	0	0	4
ELN	237	Local Area Networks	2	3	0	0	3
COE	111	Co-op Work Exp I	0	0	0	10	1
COE	121	Co-op Work Exp II	0	0	0	10	1
COE	131	Co-op Work Exp III	0	0	0	10	1
COE	211	Co-op Work Exp IV	0	0	0	10	1
COE	112	Co-op Work Exp I	0	0	0	20	2
COE	122	Co-op Work Exp II	0	0	0	20	2
COE	113	Co-op Work Exp I	0	0	0	30	3

Total Semester Hour Credits:

76

Not more than 3 shc may be taken in COE.

See your academic advisor or division dean for appropriate selection of humanities/fine arts elective and social/behavioral science elective.



## **Emergency Medical Science Associate in Applied Science Degree A45340**

The Emergency Medical Science curriculum is designed to prepare graduates to enter the workforce as paramedics. Additionally, the program can provide an Associate Degree for individuals desiring an opportunity for career enhancement.

The course of study provides the student an opportunity to acquire basic and advanced life support knowledge and skills by utilizing classroom instruction, practical laboratory sessions, hospital clinical experience, and field internships with emergency medical service agencies.

Students progressing through the program may be eligible to apply for both state and national certification exams. Employment opportunities include ambulance services, fire and rescue agencies, air medical services, specialty areas of hospitals, industry, educational institutions, and government agencies.

### **Specific EMS Program Requirements**

1. Applicant must hold a current/valid driver's license.
2. A minimum grade of "C" (80%) in each Emergency Medical Science course (EMS prefix) is required in order to pass each course and to remain in the program. Readmission will be considered on an individual and space available basis.
3. In addition to meeting the college admission requirements, applicants to the Associate Degree Emergency Medical Science Program must meet the following:
  - a. Complete APPLICATION FOR EMS PROGRAMS - obtainable from the EMS department chairperson.
  - b. Must submit a physician's statement, including record of immunizations and physical and emotional status (forms available from the EMS Department).
  - c. Hepatitis B Vaccine (HBV) series must be completed before beginning any clinical experience. Also accepted: (1) documentation of prior series completion, or (2) waiver of vaccine from a physician.
  - d. Schedule an appointment with the department chairperson for a formal interview for entry into the EMS program.
4. Professional liability insurance is REQUIRED for students in the EMS Program and is arranged through the EMS Department. The insurance is renewed every year and must be paid BEFORE beginning any clinical experiences.
5. Applicants from countries whose language is not English will be required to demonstrate proficiency in the English language by scoring no less than 540 on the Test of English as a Foreign Language (TOEFL). United States resident applicants whose primary spoken language is not English will be required to demonstrate proficiency in the English language. This may include scoring no less than 540 on the TOEFL. The Department Chairperson of the Health program being applied for, in consultation with the Dean of Health and Business, will determine the means of demonstrating proficiency on an individual basis.
6. Schedule and take the ASSET test for determining Math and English placement at Gaston College (this can be scheduled through the Admissions Office). Individuals who have completed college level Math and English courses with a grade of "C" or higher do not have to take the ASSET. The ASSET test may be waived of any person who has scored 520 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT.

# Emergency Medical Science

Title			Class	Lab	Clinic	Credit
<b>Fall Semester I</b>						
+ - EMS	110	EMT-Basic	4	6	0	6
+ - EMS	111	Prehospital Environment	2	2	0	3
EMS	150	Vehicle Operations and EMS Communication	1	3	0	2
BIO	168	Anatomy and Physiology I	3	3	0	4
CIS	110	Intro to Computers	<u>2</u>	<u>2</u>	<u>0</u>	<u>3</u>
Semester Total:			12	16	0	18
<b>Spring Semester I</b>						
- * EMS	120	Intermediate Interventions	2	3	0	3
- * EMS	121	EMS Clinical Practicum I	0	0	6	2
- * EMS	130	Pharmacology I for EMS	1	3	0	2
- * EMS	131	Advanced Airway Management	1	2	0	2
BIO	169	Anatomy and Physiology II	3	3	0	4
ENG	111	Expository Writing	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
Semester Total:			10	11	6	16
<b>Summer Semester I</b>						
* EMS	210	Advanced Patient Assessment	1	3	0	2
* EMS	220	Cardiology	2	6	0	4
* EMS	221	Clinical Practicum II	0	0	9	3
	OR	EMS 222 and COE 121	0	6	10	3
ENG	114	Prof Research and Reporting	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
Semester Total:			6	9	9	12
<b>Fall Semester II</b>						
* EMS	140	Rescue Scene Management	1	6	0	3
* EMS	231	Clinical Practicum III	0	0	9	3
	OR	EMS 232 and COE 131	0	6	10	3
* EMS	250	Adv. Medical Emergencies	2	3	0	3
* EMS	260	Adv. Trauma Emergencies	1	3	0	2
SOC	210	Intro To Sociology	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
Semester Total:			7	12	9	14
<b>Spring Semester II</b>						
EMS	235	EMS Management	2	0	0	2
* EMS	240	Special Needs Patients	1	3	0	2
* EMS	241	Clinical Practicum IV	0	0	9	3
	OR	EMS 242 and COE 211	0	6	10	3
* EMS	270	Life Span Emergencies	2	2	0	3
* EMS	285	EMS Capstone	1	3	0	2
PHI	240	Intro Ethics	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
Semester Total:			9	8	9	15
Total Semester Hour Credits:						75

- + = Required for EMT-Basic NC OEMS State Certification
- = Required for EMT-Intermediate NC OEMS State Certification
- \* = Required for EMT-Paramedic NC OEMS State Certification



# Emergency Medical Services Bridging Program

## Associate in Applied Science Degree

### (A453AOB)

The EMS Bridging program was developed to allow currently certified non-degree EMT Paramedics to earn a two-year Associate of Applied Science Degree in Emergency Medical Science by completing (EMS Bridging course, Rescue Scene Management, EMS Management) and all other general education requirements for this degree.

**To be eligible for the Bridging Program the student must :**

1. Complete Gaston College Admissions Office requirements (ASSET, official high school transcript or GED certification, official college transcript, etc.).
2. Complete EMS Department admission requirements (Bridging Program application, medical form, and Test of English as a Foreign Language).
3. Satisfactory scores on the Gaston College ASSET placement tests: (Math, English, Reading). The ASSET test may be waived of any person who has scored 520 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT.
4. Current certification as an EMT-Paramedic (North Carolina OEMS Certification or National Registry).
- \*5. Current certification in the following:
  - A. Advanced Cardiac Life Support (ACLS);
  - B. Basic Trauma Life Support or Prehospital Trauma Life Support (BTLS-PHTLS);
  - C. Pediatric Advanced Life Support (PALS).

These certifications will meet the residency requirements for the core curriculum.

6. 4,000 patient contact hours at the EMT-Paramedic level (letter from EMS Director).
7. Successfully complete the following courses:

		Title	Class	Lab	Clinic	Credit
CIS	110	Intro to Computers	2	2	0	3
BIO	168	Anatomy and Physiology I	3	2	0	4
		<b>OR</b> transferable series Anatomy & Physiology				
BIO	169	Anatomy & Physiology II	3	2	0	4
ENG	111	Expository Writing	3	0	0	3
ENG	114	Professional Research and Reporting	3	0	0	3
SOC	210	Intro to Sociology	3	0	0	3
PHI	240	Introduction to Ethics	3	0	0	3
EMS	140	Rescue Scene Management	1	6	0	3
		<b>OR</b> current NC certification as Advanced Rescue Technician				
EMS	235	EMS Management	2	0	0	2
EMS	280	EMS Bridging Course	2	2	0	3

Total Semester Hour Credits: 31

8 Hours Residency Required

# Fire Protection Technology

## Associate In Applied Science Degree

### (A55240)

The Fire Protection Technology curriculum is designed to provide individuals with technical and professional knowledge to make decisions regarding fire protection for both public and private sectors. It also provides a sound foundation of continuous higher learning in fire protection, administration, and management.

Course work includes classroom and laboratory exercise to introduce the students to various aspects of fire protection. Students will learn technical and administrative skills such as hydraulics, hazardous materials.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
		Humanities Elective	3	0	0	0	3
		Social Science Elective	3	0	0	0	3
MAT	115	Mathematical Models	2	2	0	0	3
<b>Major Courses</b>							
FIP	120	Intro to Fire Protection I	2	0	0	0	2
FIP	124	Fire Prev. & Public Ed	3	0	0	0	3
FIP	128	Detection & Investigation	3	0	0	0	3
FIP	220	Fire Fighting Strategies	3	0	0	0	3
FIP	230	Chem of Hazardous Mat 1	5	0	0	0	5
FIP	256	Munic Public Relations	2	0	0	0	2
FIP	132	Building Construction	3	0	0	0	3
FIP	224	Instruc Methodology	4	0	0	0	4
FIP	140	Industrial Fire Protect	2	0	0	0	2
FIP	152	Fire Protection Law	2	0	0	0	2
FIP	136	Inspections & Codes	3	2	0	0	3
FIP	276	Managing Fire Services	3	0	0	0	3
FIP	236	Emergency management	2	0	0	0	2
FIP	144	Sprinklers & Auto Alarms	2	2	0	0	3
FIP	228	Local Govt Finance	2	0	0	0	2
FIP	240	Fire Service Supervision	2	0	0	0	2
FIP	252	Apparatus Spec & Purch	2	0	0	0	2
FIP	232	Hydraulics & Water Dist	2	2	0	0	3
POL	120	American Government	3	0	0	0	3

Total Semester Hour Credits:

67



# General Occupational Technology

## Associate in Applied Science Degree

### (A55280)

The General Occupational Technology curriculum provides individuals with an opportunity to upgrade their skills and to earn an associate degree by taking courses suited for their occupational interests and/or needs.

The curriculum content will be individualized for students according to their occupational interests and needs. A program of study for each student will be selected from associate degree-level courses offered by the College.

Graduates will become more effective workers, better qualified for advancements within their field of employment, and become qualified for a wide range of entry-level employment opportunities.

	Title	Class	Lab	Clinical	Work	Credit
<b>General Education Courses</b>						
ACA 118	College Study Skills	1	2	0	0	2
ENG 111	Expository Writing	3	0	0	0	3
ENG 114	Prof Research/Report	3	0	0	0	3
Humanities/Fine Arts Elective		3	0	0	0	3
(any H/FA elective accepted for an AA degree)						
Social/Behavioral Science Elective		3	0	0	0	3
(any S/BS elective accepted for an AA degree)						
Natural Science/Mathematics						
Mathematics (choose one)						
MAT 110	Mathematical Measurement	3	0	0	0	3
MAT 115	Mathematical Models	3	0	0	0	3
MAT 120	Geometry & Trig	3	0	0	0	3
MAT 121	Algebra/Trigonometry I	2	2	0	0	3
MAT 151	Statistics I	3	0	0	0	3
MAT 151A	Statistics I Lab	0	2	0	0	1
MAT 161	College Algebra	3	0	0	0	3
MAT 161A	College Algebra Lab	0	2	0	0	1
Science						
Any lab science course		3	2/3	0	0	4
(BIO, CHM, PHS, PHY)						
<b>Major Courses</b>						
CIS 110	Intro to Computers	2	2	0	0	3
<b>OR</b>						
EGR 115	Intro to Technology	2	6	0	0	4
<b>AND</b>						
18 SHC from a combination of core courses for A.A.S. curricula approved to be offered at Gaston College						
<b>AND</b>						
<b>Choose one:</b>						
FRE 111	Elementary French I	3	0	0	0	3
SPA 111	Elementary Spanish I	3	0	0	0	3
SPA 120	Spanish for the Workplace	3	0	0	0	3
<b>AND</b>						
<b>23 SHC to be selected from the following prefixes:</b>						
ACC, AHR, ARC, ATR, AUT, BPR, BUS, CIS,CIV, CJC, COE, CSC, DDF, DFT, ECO, EDU, EGR, ELC, ELN, FIP, HEA, HYD, ISC, LEX,MAC, MAT, MEC, MED, MKT, MNT, NET, OMT, OST, PBT, PLA, SRV, WLD						
COE cannot exceed 8 SHC						
Total Semester Hours Credit						67-69

# Industrial Engineering Technology

## Associate In Applied Science Degree

### (A40240)

The Industrial Engineering Technology curriculum prepares graduates to perform as technical leaders in manufacturing and service organizations. The curriculum incorporates the study and application of methods and techniques for developing, implementing and improving integrated systems involving people, material, equipment and information.

The coursework emphasizes analytical and problem-solving techniques for process development and improvement. The curriculum includes systems analysis, quality and productivity improvement techniques, cost analysis, facilities planning, organizational management, effective communications, and computer usage as a problem-solving tool.

Graduates of the curriculum will qualify for positions in a wide range of manufacturing and service organizations. Employment opportunities include industrial engineering technology, quality assurance, supervision, team leadership, and facilities management. Certification is available through organizations such as ASQC, SME, and APICS.

This curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202 -- Telephone (410) 347-7700.

This program can be completed using either a day or evening sequence.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
PHY	131	Physics-Mechanics	3	2	0	0	4
		Humanities/Fine Arts					
		Elective	3	0	0	0	3
		Social/Behavioral					
		Science Elective	3	0	0	0	3
<b>Major Courses</b>							
DFT	170	Engineering Graphics	2	2	0	0	3
EGR	115	Intro to Technology	2	6	0	0	4
EGR	285	Design Project	0	4	0	0	2
ISC	112	Industrial Safety	2	0	0	0	2
ISC	128	Industrial Leadership	2	0	0	0	2
ISC	132	Mfg Quality Control	2	3	0	0	3
ISC	136	Productivity Analysis I	2	3	0	0	3
ISC	236	Productivity Analysis II	2	3	0	0	3
ISC	243	Prod & Operations Mgmt I	2	3	0	0	3
ISC	244	Prod & Operations Mgmt II	2	3	0	0	3
ISC	255	Engineering Economy	2	2	0	0	3
ISC	256	System Design	2	3	0	0	3
MAT	122	Algebra/Trigonometry II	2	2	0	0	3
MAT	223	Applied Calculus	2	2	0	0	3
MEC	145	Manufacturing Materials I	2	3	0	0	3



MEC	245	Manufacturing Materials II	2	3	0	0	3
PHY	132	Physics-Elec & Magnetism	3	2	0	0	4
<b>Electives (Select 7 shc)</b>							
CSC	129	Technical Programming	2	3	0	0	3
EGR	130	Engineering Cost Control	2	2	0	0	3
ISC	222	Project Planning/Control	1	2	0	0	2
ISC	223	Quantitative Methods	3	0	0	0	3
ISC	230	Simulation Prod Processes	1	3	0	0	2
ISC	233	Industrial Organ & Mgmt	3	0	0	0	3
ISC	237	Quality Management	2	3	0	0	3
COE	111	Co-op Work Exp I	0	0	0	10	1
COE	121	Co-op Work Exp II	0	0	0	10	1
COE	131	Co-op Work Exp III	0	0	0	10	1
COE	112	Co-op Work Exp I	0	0	0	20	2
COE	113	Co-op Work Exp I	0	0	0	30	3

Total Semester Hour Credits: 76

Not more than 3 shc may be taken in COE.

See your academic advisor or division dean for appropriate selection of humanities/ fine arts elective and social/behavioral science elective.

# Industrial Management Technology

## Associate In Applied Science Degree

### (A50260)

The Industrial Management Technology curriculum is designed to equip students with the knowledge, skills, and abilities to function effectively in staff, front-line leadership, and mid-level management positions in organizations. The program emphasizes team building, TQM, SPC, motivation, continuous improvement, systems, and leadership.

Coursework includes the integrated study of quality and productivity improvement, production operations, management, financial analysis, problem solving, and management of resources - human, physical, and information. Coursework incorporates a broad understanding of computer applications to analyze and solve problems.

Graduates should qualify for entry-level positions such as front-line supervisor, engineering assistant, production planner, inventory supervisor, or quality control technician. With additional training and experience, graduates could become plant managers or production managers.

This program can be completed using either a day or evening sequence.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
MAT	122	Algebra/Trigonometry II	2	2	0	0	3
PHY	131	Physics-Mechanics	3	2	0	0	4
		Humanities/Fine Arts					
		Elective	3	0	0	0	3
		Social/Behavioral					
		Science Elective	3	0	0	0	3
<b>Major Courses</b>							
DFT	170	Engineering Graphics	2	2	0	0	3
EGR	115	Intro to Technology	2	6	0	0	4
EGR	130	Engineering Cost Control	2	2	0	0	3
ISC	112	Industrial Safety	2	0	0	0	2
ISC	128	Industrial Leadership	2	0	0	0	2
ISC	132	Mfg Quality Control	2	3	0	0	3
ISC	135	Prin of Industrial Mgmt	3	0	0	0	3
ISC	136	Productivity Analysis I	2	3	0	0	3
ISC	233	Industrial Org & Mgmt	3	0	0	0	3
ISC	236	Productivity Analysis II	2	3	0	0	3
ISC	237	Quality Management	2	3	0	0	3
ISC	243	Prod & Operations Mgmt II	2	3	0	0	3
ISC	244	Prod & Operations Mgmt II	2	3	0	0	3
ISC	255	Engineering Economy	2	2	0	0	3
MEC	145	Manufacturing Materials I	2	3	0	0	3
MEC	245	Manufacturing Materials II	2	3	0	0	3



**Electives (Select 7 shc)**

ISC	222	Project Planning/Control	1	2	0	0	2
ISC	223	Quantitative Methods	3	0	0	0	3
ISC	230	Simulation Prod Processes	1	3	0	0	2
ISC	235	Management Problems	3	0	0	0	3
ISC	256	System Design	2	3	0	0	3
COE	111	Co-op Work Exp I	0	0	0	10	1
COE	121	Co-op Work Exp II	0	0	0	10	1
COE	131	Co-op Work Exp III	0	0	0	10	1
COE	112	Co-op Work Exp I	0	0	0	20	2
COE	113	Co-op Work Exp I	0	0	0	30	3

Total Semester Hour Credits:

76

Not more than 3 she may be taken in COE.

See your academic advisor or division dean for appropriate selection of humanities/fine arts elective and social/behavioral science elective.

# Information Systems

## Associate In Applied Science Degree

### (A25260)

The Information Systems curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible program designed to meet community information systems needs.

Course work includes computer systems terminology and operations, logic, operating systems, database, data communications/networking, and related business topics. Studies will provide experience for students to implement, support, and customize industry-standard information systems.

Graduates should qualify for a wide variety of computer-related, entry-level positions that provide opportunities for advancement with increasing experience and ongoing training. Duties may include systems maintenance and troubleshooting, support and training, and business applications design and implementation.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
		Humanities Elective**	3	0	0	0	3
ECO	151	Survey of Economics	3	0	0	0	3
MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1
<b>Major Courses</b>							
BUS	110	Introduction to Business	3	0	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
CIS	115	Intro to Prog. & Logic	2	2	0	0	3
CIS	118	IS Professional Comm	2	0	0	0	2
CIS	120	Spreadsheet I	2	2	0	0	3
CIS	121	User Support & Softw Eval	1	4	0	0	3
CIS	130	Survey of Operating Sys	2	3	0	0	3
CIS	147	Operating Sys-Windows	2	2	0	0	3
CIS	152	Database Concepts & Apps	2	2	0	0	3
CIS	153	Database Applications	2	2	0	0	3
CIS	162	MM Presentation Software	2	2	0	0	3
CIS	163	Prog. Interfaces Internet	2	2	0	0	3
CIS	172	Intro to the Internet	2	3	0	0	3
CIS	215	Hardware Install/Maint	2	3	0	0	3
CIS	220	Spreadsheet II	1	2	0	0	2
CIS	225	Integrated Software	1	2	0	0	2
CSC	139	Visual Basic Programming	2	3	0	0	3
NET	110	Data Comm/Networking	2	2	0	0	3
OST	136	Word Processing*	1	2	0	0	2
OST	233	Office Publications Design	2	2	0	0	3
OST	236	Adv Word/Info Procedures	2	2	0	0	3

Total Semester Hours Credit: 75

\*Requires OST 131 (Keyboarding) or proof of touch keyboarding skills.

\*\*Humanities Elective: ART, ENG, FRE, PHI, MUS, REL, SPA, and HUM.

Course credits earned in the Major Courses over five years ago will not apply toward the Associate of Applied Science degree in Information Systems.



# Machining Technology

## Associate In Applied Science Degree

### (A50300)

The Machining Technology curriculum is designed to develop skills in the theory and safe use of hand tools, power machinery, computerized equipment, and sophisticated precision inspection instruments.

Students will learn to interpret blueprints, set up manual and CNC machines, perform basic and advanced machining operations, and make decision to insure that work quality is maintained.

Employment opportunities for machining technicians exist in manufacturing industries, public institutions, governmental agencies, and a wide range of specialty machining job shops.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
		Humanities Elective	3	0	0	0	3
		Social Science Elective	3	0	0	0	3
MAT	120	Geometry and Trigonometry	2	2	0	0	3
<b>Major Courses</b>							
BPR	111	Blueprint Reading	1	2	0	0	2
BPR	121	Blueprint Reading: Mech	1	2	0	0	2
DFT	121	Intro to GD & T 1	2	0	0	2	
MAC	111	Machining Technology I	2	12	0	0	6
MAC	112	Machining Technology II	2	12	0	0	6
MAC	113	Machining Technology III	2	12	0	0	6
MAC	114	Intro to Metrology	2	0	0	0	2
MAC	121	Intro to CNC	2	0	0	0	2
MAC	122	CNC Turning	1	3	0	0	2
MAC	124	CNC Milling	1	3	0	0	2
MAC	222	Advanced CNC Turning	1	3	0	0	2
MAC	224	Advanced CNC Milling	1	3	0	0	2
MAC	231	CNC Graphics Prog: Turning	1	4	0	0	3
MAC	232	CNC Graphics Prog: Mill	1	4	0	0	3
<b>*Select 8 SHC From the following courses:</b>							
MAC	243	Die Making I	2	6	0	0	4
MAC	245	Mold Construction	2	6	0	0	4
COE	111	Co-Op Work Experience I	0	10	0	0	1
COE	121	Co-Op Work Experience II	0	10	0	0	1
COE	131	Co-Op Work Experience III	0	10	0	0	1
COE	211	Co-Op Work Experience IV	0	10	0	0	1
COE	112	Co-Op Work Experience I	0	20	0	0	2
COE	122	Co-Op Work Experience II	0	20	0	0	2

Total Semester Hours Credit:

65

See your academic advisor or division dean for appropriate selection of humanities/social/behavioral science elective.

# Mechanical Drafting Technology

## Associate In Applied Science Degree

### (A50340)

The Mechanical Drafting Technology curriculum prepares technicians to produce drawings of mechanical parts, components of mechanical systems, and mechanisms. CAD and the importance of technically correct drawings and designs based on current standards are emphasized.

Course work includes mechanical drafting, CAD, and proper drawing documentation. Concepts such as machine shop processes, basic materials, and physical sciences, as they relate to the design process, are also included. The use of proper dimensioning and tolerance techniques is stressed.

Graduates should qualify for employment in mechanical areas, such as manufacturing, fabrication, research and development, and service industries.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
		Humanities Elective	3	0	0	0	3
		Social Science Elective	3	0	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
MAT	122	Algebra/Trigonometry II	2	2	0	0	3
PHY	131	Physics-Mechanics	3	2	0	0	4
<b>Major Courses</b>							
DFT	111	Tech Drafting I	1	3	0	0	2
DFT	111A	Tech Drafting-Lab	0	3	0	0	1
DFT	112	Tech Drafting II	1	3	0	0	2
DFT	112A	Tech Drafting II-Lab	0	3	0	0	1
DFT	121	Intro to GD & T	1	2	0	0	2
DFT	151	CAD I	2	3	0	0	3
DFT	152	CAD II	2	3	0	0	3
DFT	153	CAD III	2	3	0	0	3
DFT	211	Gears, Cams, Pulleys	1	3	0	0	2
DFT	218	Industrial Sys Schematics	1	2	0	0	2
DDF	211	Design Drafting I	2	6	0	0	4
CSC	129	Technical Programming	2	3	0	0	3
ISC	112	Industrial Safety	2	2	0	0	2
MAC	121	Intro to CNC	2	0	0	0	2
MAC	122	CNC Turning	1	3	0	0	2
DFT	243	Basic Die Design	2	6	0	0	4
MEC	210	Materials-Stress Analysis	1	2	0	0	2
MEC	145	Mfg Materials I	2	3	0	0	3
MEC	180	Engineering Materials	2	3	0	0	3
<b>Choose 6 hours from the following:</b>							
DFT	231	Jig & Fixture Design	1	2	0	0	2
EGR	115	Introduction To Tech	2	6	0	0	4
MEC	112	Machine Processes II	2	3	0	0	3
COE	111	Co-Op Work Experience	0	0	10	0	1
COE	112	Co-Op Work Experience	0	20	0	0	2
COE	113	Co-Op Work Experience	0	30	0	0	3



COE	114	Co-Op Work Experience	0	40	0	0	4
COE	115	Co-Op Work Experience	0	10	0	0	1
COE	122	Co-Op Work Experience	0	20	0	0	2
COE	125	Co-Op Work Experience	0	10	0	0	1

Total Semester Hours Credit: 74

See your academic advisor or division dean for appropriate selection of humanities/social behavioral science elective.

# Mechanical Engineering Technology

## Associate In Applied Science Degree

### (A40320)

The Mechanical Engineering Technology curriculum prepares graduates for employment as mechanical technicians. Typical assignments would include assisting in the design, development, testing and repair of mechanical equipment. Emphasis is placed on the integration of theory and mechanical principles.

Coursework includes applied mechanics, manufacturing methods and processes, computer usage, computer-aided drafting, mathematics, physics, and oral and written communications. The courses will stress critical thinking, planning, and problem solving.

Graduates of the curriculum will find employment opportunities in the diversified branches of the mechanical field. Mechanical engineering technicians are employed in many types of manufacturing, fabrication, research and development, and service industries.

This curriculum is accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, Inc., 111 Market Place, Suite 1050, Baltimore, MD 21202 -- Telephone (410) 347-7700.

This program can be completed using either a day or evening sequence.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
		Humanities/Fine Arts					
		Elective	3	0	0	0	3
		Social/Behavioral					
		Science Elective	3	0	0	0	3
<b>Major Courses</b>							
ATR	112	Introduction to Automation	2	3	0	0	3
ATR	211	Robot Programming	2	3	0	0	3
CSC	129	Technical Programming	2	3	0	0	3
DFT	111	Technical Drafting I	1	3	0	0	2
DFT	151	CAD I	2	3	0	0	3
EGR	115	Intro to Technology	2	6	0	0	4
EGR	285	Design Project	0	4	0	0	2
MAT	122	Algebra/Trigonometry II	2	2	0	0	3
MAT	223	Applied Calculus	2	2	0	0	3
MEC	145	Mfg Materials I	2	3	0	0	3
MEC	180	Engineering Materials	2	3	0	0	3
MEC	250	Statics & Strength of Mtls	4	3	0	0	5
MEC	265	Fluid Mechanics	2	2	0	0	3
MEC	267	Thermal Systems	2	2	0	0	3
MEC	270	Machine Design	3	3	0	0	4
MEC	275	Engineering Mechanisms	2	2	0	0	3



PHY	131	Physic-Mechanics	3	2	0	0	4
PHY	132	Physics-Elec & Magnetism	3	2	0	0	4
<b>Electives (Select 3 SHC)</b>							
MEC	111	Machine Processes I	2	3	0	0	3
MEC	112	Machine Processes II	2	3	0	0	3
MEC	283	Introduction to CAM	2	3	0	0	3
PLA	120	Injection Molding	2	3	0	0	3
PLA	162	Plastics Mfg Processes	2	3	0	0	3
PLA	230	Advanced Plastic Mfg	3	3	0	0	4
COE	111	Co-op Work Exp I	0	0	0	10	1
COE	121	Co-op Work Exp II	0	0	0	10	1
COE	131	Co-op Work Exp III	0	0	0	10	1
COE	211	Cop-op Work Exp IV	0	0	0	10	1
COE	112	Co-op Work Exp I	0	0	0	20	2
COE	122	Co-op Work Exp II	0	0	0	20	2
COE	113	Co-op Work Exp I	0	0	0	30	3

Total Semester Hour Credits:

76

Not more than 3 shc may be taken in COE.

See your academic advisor or division dean for appropriate selection of humanities/fine arts elective and social/behavioral science elective.

## **Medical Assisting Associate in Applied Science Degree (A45400)**

The Medical Assisting Curriculum prepares the graduate to be a multi-skilled practitioner qualified to perform administrative, clinical and laboratory procedures. The administrative aspects of instruction cover scheduling reports, medical records, medical billing and collection; transcription and computer operations. Clinical and laboratory aspects of study include preparation of the patient for examination, assessing vital signs, assisting with examination and treatment, performing routine lab tests, using the electrocardiograph machine and administration of medication. Developing competencies in effective communication, managerial and supervisory skills, recognizing and responding to emergencies, and demonstrating adherence to ethical and legal standards of medical practices are emphasized.

Graduates of programs accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) are eligible to take the certification examination administered by the Certifying Board of the American Association of Medical Assistants to become a Certified Medical Assistant (CMA). The Gaston College Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), on recommendation of the committee on Accreditation for Medical Assistant Education.\* \*aka The Curriculum Review Board of the American Association of Medical Assistants' Endowment (AAMAE).

### **Admission Requirements**

Individuals applying for admission to the Gaston College Medical Assisting Program must meet the requirements for general admission to Gaston College and the requirements for admission into the Medical Assisting Program.

**Applicants should complete the admission process in the order listed below. Completion of each criterion is required before an applicant can be interviewed for acceptance into the program.**

**Applicants will be contacted for an admission interview by the Medical Assisting Department Chairperson after receipt of the Medical Assisting Program application and verification of files being complete through the Gaston College Admissions Office (ACT/SAT scores, ASSET scores, and transcripts).**

1. Complete the Gaston College Application (this form can be obtained from the Admissions Office).
2. Complete the Gaston College Medical Assisting Program Application form (this form can be requested through the Medical Assisting Office).
3. Schedule and take the ASSET examination for determining Math and English placement at Gaston College (this can be scheduled through the Admissions Office). Individuals who have completed college level Math and English courses with a grade of "C" or higher do not have to take the ASSET. The ASSET test may be waived of any person who has scored 520 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT.
4. Schedule and take the ACT examination for determining acceptance scores for admission into the Medical Assisting Program (this can be scheduled through the Counseling Center).



Please Note: Applicants must attain a minimum composite score of 17 or higher on the ACT examination or a score of 830 or higher on the SAT examination to be admitted into the Medical Assisting Program. These scores must be current within 5 years of program admission. Individuals with a previous college degree will have the ACT/SAT examination waived with proof of graduation from an accredited college.

- 5. Submit an official copy of High School Transcript with graduation date or GED transcript with graduation date directly to the Admissions Office.
- 6. Submit an official College Transcript directly to the Admissions Office if you have attended any other college.

Enrollment in the Medical Assisting Program is limited to 40 students. Applicants are advised to apply early.

**MEDICAL ASSISTING**

		Title	Class	Lab	Clinical	Credit
<b><u>First Semester (FALL)</u></b>						
MED	110	Orientation to Medical Assisting	1	0	0	1
MED	121	Medical Terminology I	3	0	0	3
ENG	111	Expository Writing	3	0	0	3
OST	131	Keyboarding	1	2	0	2
BIO	168	Anatomy & Physiology I	<u>3</u>	<u>3</u>	<u>0</u>	<u>4</u>
			11	5	0	13
<b><u>Second Semester (SPRING)</u></b>						
MED	122	Medical Terminology II	3	0	0	3
BIO	169	Anatomy & Physiology II	3	3	0	4
		HUMANITIES ELECTIVE	3	0	0	3
MED	140	Exam Room Procedures I	3	4	0	5
PSY	150	General Psychology	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
			15	7	0	18
<b><u>Third Semester (SUMMER)</u></b>						
MED	134	Medical Transcription	2	2	0	3
MED	130	Admin. Office Procedures I	1	2	0	2
ENG	112*	Argument-Based Research	3	0	0	3
MED	150	Laboratory Procedures I	<u>3</u>	<u>4</u>	<u>0</u>	<u>5</u>
			9	8	0	13
<b><u>Fourth Semester (FALL)</u></b>						
MED	250	Laboratory Procedures II	3	4	0	5
MED	270	Symptomatology	2	2	0	3
MED	240	Exam Room Procedures II	3	4	0	5
MED	131	Admin. Office Procedures II	<u>1</u>	<u>2</u>	<u>0</u>	<u>2</u>
			9	12	0	15
<b><u>Fifth Semester (SPRING)</u></b>						
MED	230	Admin. Office Procedures III	1	2	0	2
MED	264	Medical Assisting Overview	2	0	0	2
MED	118	Medical Law & Ethics	2	0	0	2
MED	272	Drug Therapy	3	0	0	3
MED	260	Clinical Externship	0	0	15	5
MED	262	Clinical Perspectives	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>
			9	2	15	15

\*Student may substitute ENG 114: Professional Research & Reporting

# Medical Office Administration

## Associate In Applied Science Degree

### (A25310)

This curriculum prepares individuals for employment in medical and other health-care related offices.

Course work will include medical terminology; information systems; office management; medical coding, billing and insurance; legal and ethical issues; formatting and word processing. Students will learn administrative and support functions and develop skills applicable in medical environments.

Employment opportunities are available in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other health-care related organizations.

*ASSET test and completion of any identified developmental courses are required prior to enrollment in this program.*

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
BIO	163	Basic Anatomy & Physiology	4	2	0	0	5
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
		Humanities Elective*	3	0	0	0	3
PSY	150	General Psychology	3	0	0	0	3
<b>Major Courses</b>							
BUS	121	Business Math	2	2	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
OST	131	Keyboarding	1	2	0	0	2
OST	132	Keyboard Skill Building	1	2	0	0	2
OST	134	Text Entry/Formatting	2	2	0	0	3
OST	135	Adv. Text Entry/Formatting	3	2	0	0	4
OST	136	Word Processing	1	2	0	0	2
OST	141	Med. Term. I-Med. Office	3	0	0	0	3
OST	142	Med. Term. II-Med. Office	3	0	0	0	3
OST	148	Med. Coding, Bill. & Insur.	3	0	0	0	3
OST	149	Medical Legal Issues	3	0	0	0	3
OST	164	Text Editing Applic.	3	0	0	0	3
OST	184	Records Management	1	2	0	0	2
OST	236	Adv. Word/Info Process.	2	2	0	0	3
OST	241	Med. Office Transcription I	1	2	0	0	2
OST	243	Med. Office Simulation	2	2	0	0	3
OST	286	Professional Development	3	0	0	0	3



**Electives (Select 4 hours)****May only select one BUS prefix**

ACC	115	College Acct.	3	2	0	0	4
BUS	110	Introduction to Business	3	0	0	0	3
BUS	115	Business Law I	3	0	0	0	3
BUS	125	Personal Finance	3	0	0	0	3
CIS	120	Spreadsheet I	2	2	0	0	3
CIS	172	Intro to the Internet	2	3	0	0	3
COE	111	Work Experience I	0	0	0	10	1
COE	121	Work Experience II	0	0	0	10	1
COE	131	Work Experience III	0	0	0	10	1
COE	112	Work Experience I	0	0	0	20	2
COE	122	Work Experience II	0	0	0	20	2
OST	122	Office Computations	1	2	0	0	2
OST	247	CPT Coding	1	2	0	0	2
OST	248	Diagnostic Coding	1	2	0	0	2
OST	284	Emerging Technologies	2	0	0	0	2

**(No more than 3 semester hours may be taken in COE.)**

Total Semester Hours Credit:

68

Course credits (OST and CIS) earned over five years ago will not apply toward the degree in Medical Office Administration.

Credits toward the A.A.S. may be given to persons who have earned the Certified Professional Secretary designation. For further information, persons holding this certification should contact the Chairperson of Office Systems Technology.

\*Humanities Elective: ART, MUS, REL, PHI, HUM, Foreign Language, and Literature.

## **Nursing (Registered Nursing – LPN-RN Track)**

### **Associate in Applied Science Degree**

#### **(A45120)**

The Associate Degree Nursing curriculum provides individuals with the knowledge and skills necessary to provide nursing care to clients and groups of clients throughout the life span in a variety of settings.

Courses will include content related to the nurse's role as a provider of nursing care, as a manager of care, as a member of the discipline of nursing, and as a member of the interdisciplinary team.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN) which is required for practice as a Registered Nurse. Employment opportunities include hospitals, long term facilities, clinics, physicians' offices, industry, and community agencies.

#### **ADMISSION INFORMATION**

Students applying for admission to the Gaston College Nursing program **MUST** meet the following requirements for **GENERAL ADMISSION** to the college:

1. Complete general admission application.
2. Completion of ASSET (required if student has not completed developmental or college level English AND math). The ASSET test may be waived of any person who has scored 520 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT.s
3. Submit official transcript from home school, international correspondence school, or high school with graduation date or GED scores (minimum score of 225 and no subscore less than 35).
4. Submit official college transcript(s), when applicable.
5. Applicants from countries whose language is not English must demonstrate proficiency in the English language by scoring no less than 540 on the Test of English as a Foreign Language (TOEFL).

#### **ADDITIONAL REQUIREMENTS TO BE ELIGIBLE TO SUBMIT AN APPLICATION TO THE ASSOCIATE DEGREE NURSING PROGRAM:**

1. Must have a minimum of 9 months of clinical nursing practice after graduation from a PNE program prior to entry into the nursing sequence of the Associate Degree program.
2. Must provide the Nursing Department with a copy of a current unrestricted license to practice practical nursing in the state of North Carolina.
3. Must have a minimum grade of "C" in all courses listed as a part of the nursing major (ADN).
4. Must have completed the required biology courses within 10 years from the date of application to the nursing program.
5. Must submit a current Adult and Infant CPR certification prior to entrance into the program.
6. Must submit a minimum composite score of 19 on the American College Test



(ACT) or a 930 on the Scholastic Aptitude Test (SAT). The highest Verbal and Math score will be accepted, OR must have completed BIO 168, 169, & 175 or their equivalent with a 2.5 Grade Point Average. ACT/SAT must be taken within 5 years of date of application.

7. United States resident applicants whose primary language is not English will be required to demonstrate proficiency in the English Language. This may include scoring no less than 540 on the TOEFL. The Department Chairperson of the Associate Degree Nursing Program, in consultation with the Dean of Health and Business, will determine the means of demonstrating proficiency on an individual basis.
8. Must submit a satisfactory "Criminal Record Check" or a notarized statement stating no record exists from the Clerk of Superior Court at the county court house in his/her county of residence. If there have been allegations of a misdemeanor(s) or felony(s) lodged against the applicant from another county, the applicant must present a notarized "Criminal Record Check" from the county in which the allegations were made. Any allegations or charges of a misdemeanor(s) or felony(s) that occur after the Criminal Record Check has been turned in must be reported to the Department Chairperson immediately.

The following criteria will be utilized by the Admissions Committee in the selection process of recommending applicants to the Nursing Faculty for admission to the program:

1. ACT/SAT score OR GPA for BIO 168, 169 & 175 or their equivalent.
2. The number of required courses completed by end of the Fall semester prior to entrance to the program.
3. Grade Point Average (GPA) in required courses.

The selection of applicants into the Program is based on the above criteria. The final selection of applicants into the program is made by the nursing faculty upon recommendation of the Admissions Committee.

A completed North Carolina Community College Student Medical Form documenting satisfactory emotional and physical health is required before entrance into the program by date to be announced by the Nursing Department Chairperson.

The required related courses will be offered on either the Gaston College Dallas campus or the Gaston College Lincolnton campus.

# Associate Degree Nursing (A45120)

		Title	Class	Lab	Clinical	Credit
<b>First Semester</b>						
<u>BIO</u>	<u>168</u>	<u>Anatomy &amp; Physiology I</u>	3	3	0	4
<u>ENG</u>	<u>111</u>	<u>Expository Writing</u>	3	0	0	3
<u>PSY</u>	<u>150</u>	<u>General Psychology</u>	3	0	0	3
NUR	115	Fundamentals of Nursing	2	3	6	5
NUR	133	Nursing Assessment	<u>2</u>	<u>3</u>	<u>0</u>	<u>3</u>
		Semester Total	13	9	6	18
<b>Second Semester</b>						
<u>BIO</u>	<u>169</u>	<u>Anatomy &amp; Physiology II</u>	3	3	0	4
<u>PSY</u>	<u>281</u>	<u>Abnormal Psychology</u>	3	0	0	3
NUR	135	Adult Nursing I	<u>5</u>	<u>3</u>	<u>9</u>	<u>9</u>
		Semester Total	11	6	9	16
<b>Third Semester</b>						
<u>BIO</u>	<u>175</u>	<u>Microbiology</u>	2	2	0	3
<u>ENG</u>	<u>114</u>	<u>Professional Research &amp; Reporting</u>	3	0	0	3
NUR	185	Mental Health Nursing	<u>3</u>	<u>0</u>	<u>6</u>	<u>5</u>
		Semester Total	8	2	6	11
<b>Fourth Semester</b>						
<u>SOC</u>	<u>210</u>	<u>Introduction to Sociology</u>	3	0	0	3
NUR	125	Maternal Child Health Nursing	5	3	6	8
NUR	188	Nursing in the Community	<u>1</u>	<u>0</u>	<u>6</u>	<u>3</u>
		Semester Total	9	3	12	14
<b>Fifth Semester</b>						
NUR	235	Adult Nursing II	4	3	15	10
NUR	255	Professional Issues	3	0	0	3
		<u>Humanities Elective (Literature, Foreign Language, Religion, Philosophy, Art, OR Music)</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
		Semester Total	10	3	15	16
Total Credit Hours for Graduation						75

Non-nursing required courses are underlined.



## **Nursing (Registered Nursing) Associate in Applied Science Degree A45120**

The Associate Degree nursing curriculum provides individuals with the knowledge and skills necessary to provide nursing care to clients and groups of clients throughout the life span in a variety of settings.

Courses will include content related to the nurse's role as a provider of nursing care, as a manager of care, as a member of the discipline of nursing, and as a member of the interdisciplinary team.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN) which is required for practice as a Registered Nurse. Employment opportunities include hospitals, long term care facilities, clinics, physician's offices, industry, and community agencies.

### **ADMISSION INFORMATION**

Students applying for admission to the Gaston College Nursing program **MUST** meet the following requirements for **GENERAL ADMISSION** to the college:

1. Complete general admission application.
2. Completion of ASSET (required if student has not completed developmental or college level English and math). The ASSET test may be waived of any person who has scored 520 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT.
3. Submit official transcript from home school, international correspondence school, or high school with graduation date or GED scores (minimum score of 225 and no subscore less than 35).
4. Submit official college transcript(s), when applicable.
5. Applicants from countries whose language is not English must demonstrate proficiency in the English language by scoring no less than 540 on the Test of English as a Foreign Language (TOEFL).

### **ADDITIONAL REQUIREMENTS TO BE ELIGIBLE TO SUBMIT AN APPLICATION TO THE ASSOCIATE DEGREE NURSING PROGRAM:**

1. Must submit a minimum composite score of 19 on the American College Test (ACT) or 930 on the Scholastic Aptitude Test (SAT). The highest Verbal and Math score will be accepted. Must be taken within 5 years from the date of application.
2. Must have a minimum grade of "C" in all courses listed as part of the nursing major (ADN program).
3. Must have completed the required biology courses within 10 years from the date of application to the nursing program.
4. Must present a current certificate as a CNA I from a North Carolina Community College Curriculum program OR a North Carolina Health Occupations Class AND be currently listed with the North Carolina Division of Facility Services.
5. United States resident applicants whose primary language is not English will be required to demonstrate proficiency in the English language. This may include scoring no less than 540 on the TOEFL. The Department Chairperson of the

Associate Degree Nursing Program, in consultation with the Dean of Health and Business, will determine the means of demonstrating proficiency on an individual basis.

6. Must submit a current Adult and Infant CPR certification prior to entrance into the program.
7. Must submit a satisfactory "Criminal Record Check" or a notarized statement stating no record exists from the Clerk of Superior Court at the county court house in his/her county of residence. If there have been allegations of a misdemeanor(s) or felony(s) lodged against the applicant from another county, the applicant must present a notarized "Criminal Record Check" from the county in which the allegations were made. Any allegations or charges of a misdemeanor(s) or felony(s) that occur after the Criminal Record Check has been turned in must be reported to the Department Chairperson immediately.

The following criteria will be utilized by the Admissions Committee in the selection process of recommending applicants to the Nursing Faculty for admission to the program:

1. ACT/SAT score.
2. The number of required courses completed by the end of the Fall semester prior to making application.
3. Grade Point Average (GPA) in required courses.

The selection of applicants into the Program is based on the above criteria. The final selection of applicants into the program is made by the nursing faculty upon recommendation of the Admissions Committee.

A completed North Carolina Community College Student Medical Form documenting satisfactory emotional and physical health is required before entrance into the program by date to be announced by the Nursing Department Chairperson.

The required related courses will be offered on either the Gaston College Dallas campus or the Gaston College Lincolnton campus.



## Associate Degree Nursing A45120

		Title	Class	Lab	Clinical	Credit
First Semester						
<u>BIO</u>	<u>168</u>	<u>Anatomy &amp; Physiology I</u>	3	3	0	4
<u>ENG</u>	<u>111</u>	<u>Expository Writing</u>	3	0	0	3
<u>PSY</u>	<u>150</u>	<u>General Psychology</u>	3	0	0	3
NUR	115	Fundamentals of Nursing	2	3	6	5
NUR	133	Nursing Assessment	<u>2</u>	<u>3</u>	<u>0</u>	<u>3</u>
		Semester Total	13	9	6	18
Second Semester						
<u>BIO</u>	<u>169</u>	<u>Anatomy &amp; Physiology II</u>	3	3	0	4
<u>PSY</u>	<u>281</u>	<u>Abnormal Psychology</u>	3	0	0	3
NUR	135	Adult Nursing I	<u>5</u>	<u>3</u>	<u>9</u>	<u>9</u>
		Semester Total	11	6	9	16
Third Semester						
<u>BIO</u>	<u>175</u>	<u>Microbiology</u>	2	2	0	3
<u>ENG</u>	<u>114</u>	<u>Professional Research &amp; Reporting</u>	3	0	0	3
NUR	185	Mental Health Nursing	<u>3</u>	<u>0</u>	<u>6</u>	<u>5</u>
		Semester Total	8	2	6	11
Fourth Semester						
<u>SOC</u>	<u>210</u>	<u>Introduction to Sociology</u>	3	0	0	3
NUR	125	Maternal Child Health Nursing	5	3	6	8
NUR	188	Nursing in the Community	<u>1</u>	<u>0</u>	<u>6</u>	<u>3</u>
		Semester Total	9	3	12	14
Fifth Semester						
NUR	235	Adult Nursing II	4	3	15	10
NUR	255	Professional Issues	3	0	0	3
		<u>Humanities Elective (Literature, Foreign Language, Religion, Philosophy, Art, OR Music)</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
		Semester Total	10	3	15	16
Total Credit Hours for Graduation						75

Non-nursing required courses are underlined.

# Office Systems Technology

## Associate In Applied Science Degree

### (A25360)

The Office Systems Technology curriculum prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic, computerized workplace.

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics.

Graduates should qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management.

*ASSET test and completion of any identified developmental courses are required prior to enrollment in this program.*

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
		Humanities Elective*	3	0	0	0	3
		Social Science Elective	3	0	0	0	3
		Natural Science <b>OR</b>					
		MAT 110 or higher	3	0	0	0	3
<b>Major Courses</b>							
ACC	115	College Accounting	3	2	0	0	4
BUS	121	Business Math	2	2	0	0	3
BUS	260	Business Communications	3	0	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
OST	131	Keyboarding	1	2	0	0	2
OST	132	Keyboard Skill Building	1	2	0	0	2
OST	134	Text Entry/Formatting	2	2	0	0	3
OST	135	Adv. Text Entry & Format	3	2	0	0	4
OST	136	Word Processing	1	2	0	0	2
OST	164	Text Editing Applic.	3	0	0	0	3
OST	184	Records Management	1	2	0	0	2
OST	223	Machine Transcription I	1	2	0	0	2
OST	233	Office Publications Design	2	2	0	0	3
OST	236	Adv. Word/Info Process.	2	2	0	0	3
OST	284	Emerging Technologies	1	2	0	0	2
OST	286	Professional Development	3	0	0	0	3
OST	289	Office Systems Mgt.	2	2	0	0	3
<b>Electives (Select 3 hours)</b>							
<b>May only select one BUS and CIS</b>							
BUS	110	Introduction to Business	3	0	0	0	3
BUS	115	Business Law I	3	0	0	0	3
BUS	125	Personal Finance	3	0	0	0	3
CIS	120	Spreadsheet I	2	2	0	0	3
CIS	162	Multimedia Pres. Software	2	2	0	0	3
CIS	172	Intro to the Internet	2	3	0	0	3



COE	111	Work Experience I	0	0	0	10	1
COE	121	Work Experience II	0	0	0	10	1
COE	131	Work Experience III	0	0	0	10	1
COE	112	Work Experience I	0	0	0	20	2
COE	122	Work Experience II	0	0	0	20	2
COE	132	Work Experience III	0	0	0	20	2
OST	122	Office Computations	1	2	0	0	2

**(No more than 3 semester hours may be taken in COE)**

Total Semester Hours Credit: 65

Course credits (OST and CIS) earned over five years ago will not apply toward the degree in Office Systems Technology.

Credits toward the A.A.S. may be given to persons who have earned the Certified Professional Secretary designation. For further information, persons holding this certification should contact the Chairperson of Office Systems Technology.

\*Humanities Elective: ART, MUS, REL, PHI, HUM, Foreign Language, and Literature.

## Office Systems Technology - Legal Associate In Applied Science Degree (A2536A)

Legal is a concentration under the curriculum title of Office Systems Technology. This curriculum prepares individuals for entry-level positions in legal or government-related offices and provides professional development for the currently employed.

Course work includes terminology, operational procedures, preparation and transcription of documents, computer software, and court-related functions, as they relate to the legal office profession. Emphasis is placed on the development of accuracy, organizational skills, discretion, and professionalism.

Graduates should qualify for employment in corporate legal departments; private practices, including real estate and estate planning; and city, state, and federal government offices. With appropriate work experience, graduates may apply for certification as a Professional Legal Secretary (PLS).

*ASSET test and completion of any identified developmental courses are required prior to enrollment in this program.*

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
		Humanities Elective*	3	0	0	0	3
		Social Science Elective	3	0	0	0	3
		Natural Science <b>OR</b>					
		MAT 110 or higher	3	0	0	0	3
<b>Major Courses</b>							
BUS	115	Business Law I	3	0	0	0	3
BUS	260	Business Communications	3	0	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
OST	131	Keyboarding	1	2	0	0	2
OST	132	Keyboard Skill Building	1	2	0	0	2
OST	134	Text Entry/Formatting	2	2	0	0	3
OST	135	Adv. Text Entry/Formatting	3	2	0	0	4
OST	136	Word Processing	1	2	0	0	2
OST	155	Legal Terminology	3	0	0	0	3
OST	156	Legal Office Procedures	2	2	0	0	3
OST	164	Text Editing Applic.	3	0	0	0	3
OST	184	Records Management	1	2	0	0	2
OST	236	Adv. Word/Info Process.	2	2	0	0	3
OST	251	Legal Document Format.	2	2	0	0	3
OST	252	Legal Transcription	2	2	0	0	3
OST	286	Professional Development	3	0	0	0	3
OST	289	Office Systems Mgt.	2	2	0	0	3



**Electives (Select 3 hours)**

ACC	115	College Accounting	3	2	0	0	4
BUS	121	Business Math	2	2	0	0	3
CIS	120	Spreadsheet I	2	2	0	0	3
CIS	172	Intro to the Internet	2	3	0	0	3
COE	111	Work Experience I	0	0	0	10	1
COE	121	Work Experience II	0	0	0	10	1
COE	122	Work Experience	0	0	0	20	2
COE	131	Work Experience III	0	0	0	10	1
COE	112	Work Experience I	0	0	0	20	2
LEX	120	Legal Research Writing I	2	2	0	0	3
LEX	270	Law Office Mgt./Tech.	1	2	0	0	2
OST	122	Office Computations	1	2	0	0	2
OST	133	Office Publications Designs	2	2	0	0	3
OST	284	Emerging Technologies	1	2	0	0	2

**(No more than 3 semester hours may be taken in COE.)**

Total Semester Hours Credit:

66

course credits (OST and CIS) earned over five years ago will not apply toward the degree in Office Systems Technology-Legal.

Credits toward the AAS may be given to persons who have earned the Certified Professional Secretary designation. For further information, persons holding this certification should contact the Chairperson of Office Systems Technology.

\*Humanities Elective: ART, MUS, REL, PHI, HUM, Foreign Language, and Literature.

# Paralegal Technology

## Associate in Paralegal Technology

### (A25380)

The Paralegal Technology curriculum prepares individuals to work under the supervision of attorneys by performing routine legal tasks and assisting with substantive legal work. A paralegal/legal assistant may not practice law, give legal advice, or represent clients in a court of law.

Course work includes substantive and procedural legal knowledge in the areas of civil litigation, legal research and writing, real estate, family law, wills, estates, trusts, and commercial law. Required courses also include subjects such as English, mathematics, and computer utilization.

Graduates are trained to assist attorneys in probate work, investigations, public records search, drafting and filing legal documents, research, and office management. Employment opportunities are available in private law firms, governmental agencies, banks, insurance agencies, and other business organizations.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
<b>ENGLISH (3 SHC)</b>							
ENG	111	Expository Writing	3	0	0	0	3
<b>Select 3.0 hours from the following courses:</b>							
Students will not receive credit for both ENG 112 and ENG 114.							
ENG	112	Arg. Based Research	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
<b>Select one of the following sequences:</b>							
MAT	115	Mathematical Models	2	2	0	0	3
Or							
MAT	151	Statistics I	3	0	0	0	3
MAT	151A	Statistics I Lab	0	2	0	0	1
Or							
MAT	161	College Algebra	3	0	0	0	3
MAT	161A	College Algebra Lab	0	2	0	0	1
<b>Select 6.0 hours from the Social/Behavioral Sciences:</b>							
ANT	210	Anthropology	3	0	0	0	3
HIS	111	World Civilization I	3	0	0	0	3
HIS	131	American History I	3	0	0	0	3
POL	110	Intro to Political Science	3	0	0	0	3
POL	120	American Government	3	0	0	0	3
POL	130	State & Local Government	3	0	0	0	3
PSY	150	General Psychology	3	0	0	0	3
SOC	210	Introduction to sociology	3	0	0	0	3
GEO	111	World Reg. Geography	3	0	0	0	3
<b>Select 3.0 hours from the Humanities/Fine Arts:</b>							
ART	111	Art Appreciation	3	0	0	0	3
MUS	110	Music Appreciation	3	0	0	0	3
ENG	131	Intro to Literature	3	0	0	0	3
ENG	231	American Literature I	3	0	0	0	3
FRE	111	Elementary French I	3	0	0	0	3
SPA	111	Elementary Spanish I	3	0	0	0	3
PHI	210	History of Philosophy	3	0	0	0	3
REL	110	World Religion	3	0	0	0	3



REL	112	Western Religion	3	0	0	0	3
REL	211	Intro to Old Test.	3	0	0	0	3
REL	212	Intro to New Test.	3	0	0	0	3
HUM	115	Critical Thinking	3	0	0	0	3

### MAJOR COURSES

LEX	110	Intro to Paralegal Study	2	0	0	0	2
LEX	120	Legal Research/Writing I	2	2	0	0	3
LEX	130	Civil Injuries	3	0	0	0	3
LEX	140	Civil Litigation I	3	0	0	0	3
LEX	150	Commercial Law I	2	2	0	0	3
LEX	210	Real Property I	3	0	0	0	3
LEX	240	Family Law	3	0	0	0	3
LEX	250	Wills, Estates, & Trusts	2	2	0	0	3

### Select 18 hours from the following courses:

LEX	121	Legal Research/Writing II	2	2	0	0	3
LEX	141	Civil Litigation II	2	2	0	0	3
LEX	160	Criminal Law & Procedure	2	2	0	0	3
LEX	170	Administrative Law	2	0	0	0	2
LEX	198	Seminar in Legal Issues	3	0	0	0	3
LEX	211	Real Property II	1	4	0	0	3
LEX	220	Corporate Law	2	0	0	0	2
LEX	260	Bankruptcy & Collections	2	0	0	0	2
LEX	270	Law Off. Mgt/Technology	1	2	0	0	2
LEX	280	Ethics & Professionalism	2	0	0	0	2

### ELECTIVES

Select 9.0 hours from the following courses, one of which must be a computer course. (In no event may a student take more than 6 hours of COE.)

CIS	110	Introduction to Computers	2	2	0	0	3
CIS	111	Basic PC Literacy	1	2	0	0	2
ACC	120	Prin. of Accounting I	3	2	0	0	4
BUS	115	Business Law I	3	0	0	0	3
CJC	231	Constitutional Law	3	0	0	0	3
COE	111	Co-op Work Experience I	0	0	0	10	1
COE	112	Co-op Work Experience I	0	0	0	20	2
COE	113	Co-op Work Experience I	0	0	0	30	3
COE	114	Co-op Work Experience I	0	0	0	40	4
COE	121	Co-op Work Exp. II	0	0	0	10	1
COE	122	Co-op Work Exp. II	0	0	0	20	2
COE	123	Co-op Work Exp. II	0	0	0	30	3
COE	124	Co-op Work Exp. II	0	0	0	40	4
COE	131	Co-op Work Exp. III	0	0	0	10	1
COE	132	Co-op Work Exp. III	0	0	0	20	2
COE	133	Co-op Work Exp. III	0	0	0	30	3
COE	134	Co-op Work Exp. III	0	0	0	40	4
COE	211	Co-op Work Exp. IV	0	0	0	10	1
COE	212	Co-op Work Exp. IV	0	0	0	20	2
COE	213	Co-op Work Exp. IV	0	0	0	30	3
COE	214	Co-op Work Exp. IV	0	0	0	40	4
OST	131	Keyboarding	1	2	0	0	2
OST	136	Word Processing	1	2	0	0	2

Total Semester Hours Credit:

67-68

## **Therapeutic Massage Associate in Applied Science Degree (A45750) and Diploma Program (D45750)**

The Massage Therapy curriculum prepares graduates to work in direct client care settings to provide manipulation, methodical pressure, friction and kneading of the body for maintaining wellness or treating alterations in wellness throughout the life span.

Course work includes normal human anatomy and physiology, therapeutic massage, ethical/legal issues, business practices, nutrition, and psychology.

Employment opportunities may be found in hospitals, rehabilitation centers, health departments, home health, medical offices, nursing homes, spas, health and sports clubs, and private practice. Graduates may be eligible to take the National Certification for Therapeutic Massage and Bodywork.

The Therapeutic Massage curriculum offers two options - a degree and a diploma program. Completion of the degree program is highly recommended as it prepares the graduate to be a practitioner with a broader knowledge base in the practice of Therapeutic Massage.

### **Admission Information**

Students applying for admission to the Gaston College Therapeutic Massage program **MUST** meet the following requirements for General Admission to the college:

1. Complete general admission application.
2. Completion of the ASSET. Individuals who have earned a "C" or better in both college-level math and English courses from a regionally accredited institution shall have the test waived. The ASSET test may be waived of any person who has scored 520 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT.
3. Submit official transcript of high school grades with graduation date OR GED scores.
4. Submit official college transcript(s), when applicable.
5. Applicants from countries whose language is not English must demonstrate proficiency in the English language by scoring no less than 540 on the Test of English as a Foreign language (TOEFL).

### **ADDITIONAL REQUIREMENTS TO BE ELIGIBLE TO SUBMIT AN APPLICATION TO THE THERAPEUTIC MASSAGE PROGRAM:**

1. Must have an overall grade point average of 2.0 or better in required college courses.
2. Must have grades of "C" or better in all related courses.
3. Must have completed the required Biology courses within 5 years from the date of application to the program.
4. Must submit a satisfactory "Criminal Record Check" or a notarized statement stating no record exists from the Clerk of Superior Court at the county court house in his/her county of residence. If there have been allegations of a misdemeanor(s) or felony(s) lodged against the applicant s/he must present a notarized "Criminal Record Check" from the county in which the allegations were made.
5. Current CPR Certification.



The following criteria will be utilized by the Admission Committee in the selection process of recommending applicants for admission to the program:

- 1. ASSET score.
- 2. The number of related courses completed by end of the fall semester prior to making application.
- 3. Grade Point Average (GPA) in related courses.

The selection of applicants into the Program is based on the above criteria. The final selection of applicants into the program is made by the Department Chairperson in consultation with the Dean of Health and Business.

A completed health form documenting satisfactory emotional and physical health is required before entrance into the program by date to be announced by the Therapeutic Massage Chairperson.

**Therapeutic Massage Curriculum (A45750)**  
**Associate in Applied Science Degree Program**

		Title	Class	Lab	Clinical	Credit
<b>First Semester</b>						
<u>BIO</u>	<u>163</u>	<u>Basic Anatomy &amp; Physiology</u>	4	2	0	5
<u>MED</u>	<u>120</u>	<u>Survey of Medical Terminology</u>	2	0	0	2
<u>PSY</u>	<u>110</u>	<u>Life Span Development</u>	3	0	0	3
<u>MTH</u>	<u>110</u>	<u>Therapeutic Massage I</u>	<u>6</u>	<u>12</u>	<u>0</u>	<u>10</u>
			15	14	0	20
<b>Second Semester</b>						
<u>ENG</u>	<u>111</u>	<u>Expository Writing</u>	3	0	0	3
<u>BIO</u>	<u>155</u>	<u>Nutrition</u>	3	0	0	3
<u>PSY</u>	<u>118</u>	<u>Interpersonal Psychology</u>	3	0	0	3
<u>MTH</u>	<u>120</u>	<u>Therapeutic Massage II</u>	<u>6</u>	<u>12</u>	<u>0</u>	<u>10</u>
			15	12	0	19
<b>Third Semester</b>						
<u>MTH</u>	<u>125</u>	<u>Therapeutic Massage III</u>	2	0	0	2
<u>MAT</u>	<u>100+</u>		<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
			5	0	0	5
<b>Fourth Semester</b>						
<u>BIO</u>	<u>271</u>	<u>Pathophysiology</u>	3	0	0	3
<u>MTH</u>	<u>210</u>	<u>Therapeutic Massage IV</u>	4	12	0	8
<u>ENG</u>	<u>115</u>	<u>Oral Communications</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
			10	12	0	14
<b>Fifth Semester</b>						
<u>BUS</u>	<u>230</u>	<u>Small Business Management</u>	3	0	0	3
<u>MTH</u>	<u>220</u>	<u>Therapeutic Massage V</u>	4	10	0	7
<u>COE</u>	<u>111</u>	<u>Co-op Work Experience I</u>	0	0	10	1
		<u>Humanities Elective</u>	<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
			10	10	10	14

Related Courses are underlined.

Total Required Minimum Semester Hours Credit: 72

50 hours of independent therapeutic massage practicum.

# THERAPEUTIC MASSAGE (D45750) Diploma Program

		Title	Class	Lab	Clinical	Credit
<b>First Semester</b>						
<u>BIO</u>	<u>163</u>	<u>Basic Anatomy &amp; Physiology</u>	4	2	0	5
<u>MED</u>	<u>120</u>	<u>Survey of Medical Terminology</u>	2	0	0	2
<u>PSY</u>	<u>110</u>	<u>Life Span Development</u>	3	0	0	3
MTH	110	Therapeutic Massage I	<u>6</u>	<u>12</u>	<u>0</u>	<u>10</u>
			15	14	0	20
<b>Second Semester</b>						
<u>ENG</u>	<u>111</u>	<u>Expository Writing</u>	3	0	0	3
<u>BIO</u>	<u>155</u>	<u>Nutrition</u>	3	0	0	3
<u>PSY</u>	<u>118</u>	<u>Interpersonal Psychology</u>	3	0	0	3
MTH	120	Therapeutic Massage II	<u>6</u>	<u>12</u>	<u>0</u>	<u>10</u>
			15	12	0	19
<b>Third Semester</b>						
MTH	125	Therapeutic Massage III	2	0	0	2
<u>MAT</u>	<u>100+</u>		<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
			5	0	0	5
*50 hours of independent therapeutic massage practicum						
Total Required Minimum Semester Hours Credit:						44

\*Upon completion of these requirements the student is eligible for a diploma and may apply for the National Certification Exam for Therapeutic Massage and Bodywork.



## **Veterinary Medical Technology Associate In Applied Science Degree (A45780)**

The Veterinary Medical Technology curriculum prepares individuals to assist veterinarians in preparing animals, equipment, and medications for examination and surgery; collecting specimens; performing laboratory, radiographic, anesthetic, and dental procedures; assisting in surgery; and providing proper husbandry for animals and their environment.

Course work includes instruction in veterinary anatomy, nutrition, parasitology, pathology, physiology, radiology, terminology, zoology, office practices, laboratory techniques, dentistry, and small and large animal clinical practices. Students also take courses in English, humanities, chemistry, and computer technology. Graduates are eligible to take state and national examinations administered by the North Carolina Veterinary Medical Board. Graduates may be employed in veterinary clinics; diagnostic, research, or pharmaceutical laboratories; zoos; academic institutions; or other areas associated with animal care.

### **Admission Requirements**

Applicants to the Veterinary Medical Technology Program must meet the following criteria for admission into the program:

1. Must be a high school or GED graduate.
2. Must meet all requirements for general admission to Gaston College (all official transcripts must be on file in the admissions office).
3. Must attain a minimum composite score of 18 on the ACT or a 870 on the SAT examination. (Exam scores must be current within 5 years prior to entry). Any applicant having completed a college degree (Associate's or higher) may waive this requirement upon presenting proof (official transcript) of their degree.
4. Must complete any developmental skills courses required (i.e. ENG 080, MAT 070 or 080) with a grade of "C" or better prior to admission into the program, as determined by the ASSET. (The ASSET is required of any student who has not completed college level English or math). The following are minimal scores required for entrance into the Vet Tech Program: English 33, Reading 33, Elementary Algebra 36. The ASSET test may be waived of any person who has scored 520 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT.
5. Complete application form for Veterinary Medical Technology Program. (These forms may be obtained by calling (704)922-6377, the Vet Tech Department extension.
6. College-level courses will be considered for transfer credit upon receipt of an applicant's transcript. Medical Terminology and Chemistry courses must be current within 10 years to be considered for transfer credit. Keyboarding courses will be considered for credit only if training was provided on computer/PC keyboards.

# Veterinary Medical Technology

			Title	Class	Lab	Clinical	Credit
<b>Fall Semester, First Year</b>							
CIS	110	Intro to Computers		2	2	0	3
ENG	111	Expository Writing		3	0	0	3
VET	110	Animal Breeds & Husbandry		2	2	0	3
MED	121	Medical Terminology I		3	0	0	3
VET	122	Veterinary Zoology		3	3	0	4
VET	137	Vet Office Practices		<u>1</u>	<u>2</u>	<u>0</u>	<u>2</u>
Semester Total				14	9	0	18
<b>Spring Semester, First Year</b>							
CHM	130	General, Organic & Biochemistry		3	0	0	3
CHM	130A	General, Organic & Biochemistry Lab		0	2	0	1
VET	131	Vet Lab Techniques I		2	3	0	3
VET	133	Vet Clinical Practice I		2	3	0	3
VET	120	Vet Anatomy & Physiology		3	3	0	4
VET	123	Veterinary Parasitology		<u>2</u>	<u>3</u>	<u>0</u>	<u>3</u>
Semester Total				12	14	0	17
<b>Summer Semester</b>							
COE	112	Coop Work Experience I		0	0	20	2
<b>Fall Semester, Second Year</b>							
ENG	114	Professional Research & Reporting		3	0	0	3
VET	211	Vet Lab Techniques II		2	3	0	3
VET	213	Vet Clinical Practice II		1	9	0	4
VET	215	Veterinary Pharmacology		3	0	0	3
VET	217	Large Animal Clinical Practice		2	3	0	3
VET	125	Veterinary Diseases I		<u>2</u>	<u>0</u>	<u>0</u>	<u>2</u>
Semester Total				13	15	0	18
<b>Spring Semester, Second Year</b>							
HUM	115	Critical Thinking		3	0	0	3
SOC	210	Introduction to Sociology		3	0	0	3
VET	212	Vet Lab Tech III		2	3	0	3
VET	214	Vet Clinical Practice III		1	9	0	4
VET	126	Vet Diseases II		1	3	0	2
VET	237	Animal Nutrition		<u>3</u>	<u>0</u>	<u>0</u>	<u>3</u>
Semester Total				13	15	0	18
TOTAL HOURS REQUIRED FOR GRADUATION							73









2001 - 2003

DIPLOMA PROGRAMS





# Air Conditioning, Heating, and Refrigeration Technology

## Diploma

### (D35100)

The Air Conditioning, Heating, and Refrigeration Technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments.

Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	101	Applied Communications I	3	0	0	0	3
MAT	101	Applied Mathematics I	2	2	0	0	3
<b>Major Courses</b>							
AHR	110	Intro to Refrigeration	2	6	0	0	5
AHR	112	Heating Technology	2	4	0	0	4
AHR	113	Comfort Cooling	2	4	0	0	4
AHR	114	Heat Pump Technology	2	4	0	0	4
AHR	130	HVAC Controls	2	2	0	0	3
AHR	133	HVAC Servicing	2	6	0	0	4
AHR	140	All-Weather Systems	1	3	0	0	2
AHR	160	Refrigerant Certification	1	0	0	0	1
AHR	211	Residential Syst Design	2	2	0	0	3
ELC	111	Introduction to Electricity	2	2	0	0	3
CIS	111	Basic PC Literacy	1	2	0	0	2
<b>*Select 2 SHC from the following courses:</b>							
AHR	215	Comm HVAC Controls	1	3	0	0	2
COE	112	Co-op Work Exp I	0	0	20	0	2
Total Semester Hour Credits:							43

**Automotive Systems Technology**  
**Diploma**  
**(D60160)**

The Automotive Systems Technology curriculum prepares individuals for employment as Automotive Service Technicians. It provides an introduction to automotive careers and increases student awareness of the challenges associated with this fast and ever-changing field.

Classroom and lab experiences integrate technical and academic course work. Emphasis is placed on theory, servicing, and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive-trains.

Upon completion of this curriculum, students should be prepared to take the ASE exam and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

			Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>								
ENG	101		Applied Communications I	3	0	0	0	3
MAT	101		Applied Mathematics	2	2	0	0	3
<b>Major Courses</b>								
AUT	110		Intro to Auto Technology	2	2	0	0	3
AUT	115		Engine Fundamentals	2	3	0	0	3
AUT	116		Engine Repair	1	3	0	0	2
AUT	14t		Suspension /Steering Sys	2	4	0	0	4
AUT	151		Brake Systems	2	2	0	0	3
AUT	152		Brake Systems Lab	0	2	0	0	1
AUT	161		Electrical Systems	2	6	0	0	4
AUT	164		Automotive Electronics	2	3	0	0	3
AUT	171		Heat and Air Condition	2	3	0	0	3
AUT	183		Engine Perform-Fuels	2	3	0	0	3
AUT	184		Engine Peform Fuels-Lab	0	3	0	0	1
AUT	185		Emission Controls.	1	2	0	0	2
AUT	231		Manual Drive Trains/Axles	2	3	0	0	3
AUT	232		Man Drive Trains/Axles-Lab	0	3	0	0	1
Total Semester Hours Credit:								42



# Civil Engineering Technology

## Diploma

### (D40140)

The primary objective of the Diploma Program of the Civil Engineering Technology curriculum is to introduce students to the employment opportunities in civil engineering technology. The objective is fulfilled through the study and application of civil engineering technology courses. All courses in the diploma can be used in the Civil Engineering Technology Associate in Applied Science Degree program.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research/Reporting	3	0	0	0	3
<b>Major Courses</b>							
CIV	125	Civil/Surveying CAD	1	6	0	0	3
CIV	230	Construction Estimating	2	3	0	0	3
CIV	240	Project Management	2	3	0	0	3
CSC	129	Technical Programming	2	3	0	0	3
EGR	115	Introduction to Technology	2	6	0	0	4
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
MAT	122	Algebra/Trigonometry II	2	2	0	0	3
PHY	131	Physics-Mechanics	3	2	0	0	4
SRV	110	Surveying I	2	6	0	0	4
Total Semester Hours Credit							36

# Early Childhood Associate Diploma (D55220)

The Child Care Worker is designed to provide training in addition to that required by beginning workers. It does provide training as required by the State of North Carolina but at a level that helps the teacher learn to diagnose the needs of his/her children and prepare appropriate lessons according to those needs.

	Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>						
ENG 111	Expository Writing	3	0	0	0	3
HUM 115	Critical Thinking 3	0	0	0	3	
PSY 150	General Psychology	3	0	0	0	3
<b>Major Courses</b>						
COE 111	Co-op Work Exp. I	0	0	0	10	1
COE 115	Seminar in Observation	1	0	0	0	1
Choose either:						
EDU 119	Early Childhood Education	3	2	0	0	4
Or choose a set of EDU 111 and EDU 112 or EDU 111 and EDU 113						
EDU 111	Early Childhood Cred. I	2	0	0	0	2
And						
EDU 112	Early Childhood Cred. II	2	0	0	0	2
Or						
EDU 113	Family/Early Child Cred.	2	0	0	0	2
EDU 131	Children, Family, & Commun.	3	0	0	0	3
EDU 146	Child Guidance	3	0	0	0	3
EDU 153	Health, Safety, & Nutrition	3	0	0	0	3
EDU 155	Art & Drama for Children	1	2	0	0	2
EDU 157	Active Play	2	2	0	0	3
EDU 185	Cognitive & Lang. Act.	3	0	0	0	3
EDU 185A	Cog. & Lang. Act. Lab	0	2	0	0	1
EDU 288	Advanced Issues	2	0	0	0	2
<b>Total Semester Hours Credit:</b>						<b>36</b>



**Electrical/Electronics Technology**  
**Diploma**  
**(D35220)**

The Electrical/Electronics Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/electronic systems found in residential, commercial, and industrial facilities.

Training, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, digital electronics, programmable logic controllers, industrial motor controls, the National Electric Code, and other subjects specific to local needs..

Graduates should qualify for a variety of jobs in the electrical/electronics field as an on-the-job trainee or apprentice, assisting in the layout, installation, and maintenance of electrical/electronic systems.

Title			Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	101	Applied Comm I	3	0	0	0	3
MAT	120	Geometry and Trig	2	2	0	0	3
<b>Major Courses</b>							
ELC	112	DC/AC Electricity	3	6	0	0	5
ELC	113	Basic Wiring I	2	6	0	0	4
ELC	115	Industrial Wiring	2	6	0	0	4
ELC	117	Motors and Controls	2	6	0	0	4
ELC	118	National Electrical Code	1	2	0	0	2
ELC	119	NEC Calculations		1	2	0	0
2							
ELC	128	Intro to PLC	2	3	0	0	3
ELC	135	Electrical Machines I	2	2	0	0	3
ELN	131	Electronic Devices	2	2	0	0	3
ELN	229	Industrial Electronics	2	4	0	0	4
Total Semester Hour Credits:							41

**Electronics Engineering Technology**  
**Diploma**  
**(D40200)**

The primary objective of the Diploma Program of the Electronics Engineering Technology curriculum is to introduce students to the employment opportunities in electronics engineering technology. The objective is fulfilled through the study and application of electronics engineering technology courses. All courses in the diploma can be used in the Electronics Engineering Technology Associate in Applied Science Degree program.

This program can be completed using either a day or evening sequence.

		Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>							
EGR	115	Intro to Technology	2	6	0	0	4
ELC	131	DC/AC Circuit Analysis	4	3	0	0	5
ELC	133	Adv Circuit Analysis	2	3	0	0	3
ELN	131	Electronic Devices	3	3	0	0	4
ELN	133	Digital Electronics	3	3	0	0	4
ELN	150	CAD for Electronics	1	3	0	0	2
ELN	244	Computer Repair	3	6	0	0	5
MAT	122	Algebra & Trig II	2	2	0	0	3
PHY	132	Physics-Elec & Magnetism	3	2	0	0	4
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
MAT	121	Algebra & Trig I	2	2	0	0	3
PHY	131	Physics-Mechanics	3	2	0	0	4
Total Semester Hour Credits:							44



# Industrial Engineering Technology

## Diploma

### (D40240)

The Industrial Engineering Technology curriculum prepares graduates to perform as technical leaders in manufacturing and service organizations. The curriculum incorporates the study and application of methods and techniques for developing, implementing and improving integrated systems involving people, material, equipment and information.

The objectives of the Industrial Engineering Technology Diploma program are to provide a basic understanding of industrial engineering quality and productivity improvement techniques thereby enhancing the training of currently employed manufacturing and service employees. The objectives are fulfilled through the study of courses in quality, productivity, industrial safety, processes, engineering technology and general education courses.

All courses in the diploma program can be applied to the TAC/ABET-accredited Associate in Applied Science degree in Industrial Engineering Technology. The program can be completed using either a day or evening sequence.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Reporting	3	0	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
<b>Major Courses</b>							
DFT	170	Engineering Graphics	2	2	0	0	3
EGR	115	Introduction to Technology	2	6	0	0	4
ISC	112	Industrial Safety	2	0	0	0	2
ISC	128	Industrial Leadership	2	0	0	0	2
ISC	132	Mfg Quality Control	2	3	0	0	3
ISC	255	Engineering Economy	2	2	0	0	3
MAT	122	Algebra/Trigonometry II	2	2	0	0	3
MEC	145	Mfg Materials I	2	3	0	0	3
MEC	245	Mfg Materials II	2	3	0	0	3
PHY	131	Physics-Mechanics	3	2	0	0	4
Select 3 shc from the following courses							
CSC	129	Technical Programming	2	3	0	0	3
EGR	130	Engineering Cost Control	2	2	0	0	3
ISC	222	Project Planning/Control	1	2	0	0	2
ISC	223	Quantitative Methods	3	0	0	0	3
ISC	233	Ind Organization & Mgmt	3	0	0	0	3
ISC	237	Quality Management	2	3	0	0	3
Total Semester Hours Credit							42

**Industrial Maintenance Technology**  
**Diploma**  
**(D50240)**

The Industrial maintenance Technology curriculum is designed to prepare or upgrade individuals to service, maintain repair, or install equipment for a wide range of industries. Instruction includes the theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial equipment and physical facilities.

Students will learn technical skills in blueprint reading, electricity, hydraulics/pneumatics, machining, welding, and various maintenance procedures. Practical application in these industrial systems will be emphasized, additional advanced course work may be offered.

Title			Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	101	Applied Comm I	3	0	0	0	3
MAT	101	Applied Mathematics I	2	2	0	0	3
<b>Major Courses</b>							
AHR	120	HVACR Maintenance	1	3	0	0	2
BPR	111	Blueprint Reading	1	2	0	0	2
CIS	111	Basic PC Literacy	1	2	0	0	2
ELC	111	Intro to Electricity	2	2	0	0	3
ELC	113	Basic Wiring I	2	6	0	0	4
ELC	117	Motors and Controls	2	6	0	0	4
ELC	128	Intro to PLC	2	3	0	0	3
HYD.	110	Hydraulics/Pneumatics I	2	3	0	0	3
ISC	110	Workplace Safety	1	0	0	0	1
MEC	111	Machine Processes I	2	3	0	0	3
WLD	112	Basic Welding Processes	1	3	0	0	2
MNT	110	Intro to Main Procedures	1	3	0	0	2
MNT	230	Pumps & Piping Systems	1	3	0	0	2
<b>Select 2 SHC from the following courses:</b>							
MNT	111	Maintenance Practices	1	3	0	0	2
MNT	150	Basic Building Maint	1	3	0	0	2
MNT	240	Industrial Equip Maint	1	3	0	0	2
MNT	220	Rigging and Moving	1	3	0	0	2
COE	112	Co-Op Work Exp I	0	0	20	0	2

Total Semester Hour Credits: 41



# Industrial Management Technology

## Diploma

### (D50260)

The Industrial Management Technology curriculum is designed to equip students with the knowledge, skills, and abilities to function effectively in staff, front-line leadership, and mid-level management positions in industrial organizations. The program emphasizes team building, quality management and control, continuous improvement, production management and leadership.

The objectives of the Industrial Management Technology Diploma program are to provide a basic understanding of industrial management practices in quality and productivity and to enhance the training of currently employed manufacturing and service employees in leadership and management skills. The objectives are fulfilled through the study of courses in quality, productivity, industrial safety, production management and general education courses.

All courses in the diploma program can be applied to the Associate in Applied Science degree in Industrial Management Technology. The program can be completed using either a day or evening sequence.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Reporting	3	0	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
<b>Major Courses</b>							
DFT	170	Engineering Graphics	2	2	0	0	3
EGR	115	Intro to Technology	2	6	0	0	4
EGR	130	Engineering Cost Control	2	2	0	0	3
ISC	112	Industrial Safety	2	0	0	0	2
ISC	128	Industrial Leadership	2	0	0	0	2
ISC	132	Mfg Quality Control	2	3	0	0	3
ISC	135	Prin of Industrial Mgmt	3	0	0	0	3
MAT	122	Algebra/Trigonometry II	2	2	0	0	3
MEC	145	Mfg Materials I	2	3	0	0	3
MEC	245	Mfg Materials II	2	3	0	0	3
<b>Elective (select one)</b>							
ISC	136	Productivity Analysis I	2	3	0	0	3
ISC	233	Indust Organization & Mgmt	3	0	0	0	3
ISC	243	Prod & Operations Mgmt I	2	3	0	0	3
ISC	255	Engineering Economy	2	2	0	0	3

# Machining Technology

## Diploma

### (D50300)

The Machining Technology curriculum is designed to develop skills in the theory and safe use of hand tools, power machinery, computerized equipment, and sophisticated precision inspection instruments.

Students will learn to interpret blueprints, set up manual and CNC machines, perform basic and advanced machining operations, and make decisions to insure that work quality is maintained.

Employment opportunities for machining technicians exist in manufacturing industries, public institutions, governmental agencies, and a wide range of specialty machining job shops.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	101	Applied Comm I	3	0	0	0	3
MAT	120	Geom and Trigonometry	2	2	0	0	3
<b>Major Courses</b>							
BPR	111	Blueprint Reading	1	2	0	0	2
MAC	111	Machining Technology I	2	12	0	0	6
BPR	121	Blueprint Read: Mech I	1	2	0	0	2
MAC	112	Machining Technology II	2	12	0	0	6
MAC	113	Machining Technology III	2	12	0	0	6
MAC	114	Intro to Metrology	2	0	0	0	2
MAC	122	CNC Turning	1	3	0	0	2
MAC	121	Intro to CNC	2	0	0	0	2
MAC	222	Advance CNC Turning	1	3	0	0	2
MAC	124	CNC Milling	1	3	0	0	2
MAC	232	CNC Graphics Prog: Mill	1	4	0	0	3
Total Semester Hour Credits:							41



# Mechanical Drafting Technology

## Diploma

### (D503A0)

The primary objective of the Diploma Program of the Mechanical Drafting Technology curriculum is to introduce students to the employment opportunities in mechanical drafting technology. The objective is fulfilled through the study and application of mechanical drafting technology courses. All courses in the diploma can be used in the Mechanical Drafting Technology Degree program.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
<b>Major Courses</b>							
CSC	129	Technical Programming	2	3	0	0	3
DFF	111	Technical Drafting I	2	6	0	0	4
DFT	112	Technical Drafting II	2	6	0	0	4
DIFT	151	CAD I	2	3	0	0	3
DFT	152	CAD II	2	3	0	0	3
DFI7	221	Electrical Drafting	2	6	0	0	4
ENG	115	Intro to Technology	2	6	0	0	4
HYD	110	Hydraulics/Pneumatics I	2	3	0	0	3
MEC	111	Machine Processes I	2	3	0	0	3
Total Semester Hours Credits							37

# Mechanical Engineering Technology

## Diploma

### (D40320)

The primary objective of the Diploma Program of the Mechanical Engineering Technology curriculum is to introduce students to the employment opportunities in mechanical engineering technology. The objective is fulfilled through the study and application of mechanical engineering technology courses. All courses in the diploma can be used in the Mechanical Engineering Technology Associate in Applied Science Degree program.

This program can be completed using either a day or evening sequence.

		Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>							
ATR	112	Introduction to Automation	2	3	0	0	3
ATR	211	Robot Programming	2	3	0	0	3
CSC	129	Technical Programming	2	3	0	0	3
DFT	111	Technical Drafting I	1	3	0	0	2
DFT	151	CAD I	2	3	0	0	3
EGR	115	Intro to Technology	2	6	0	0	4
MAT	122	Algebra & Trig II	2	2	0	0	3
MEC	145	Mfg Materials I	2	3	0	0	3
MEC	180	Engineering Materials	2	3	0	0	3
PHY	131	Physics-Mechanics	3	2	0	0	4
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
MAT	121	Algebra & Trig I	2	2	0	0	3
Total Semester Hour Credits:							37



# Office Systems Technology

## General Diploma

### (D25360)

The Office Systems Technology-General curriculum is designed for the individual entering, upgrading, or retraining in the office occupations. Special emphasis is on basic office duties and responsibilities for the computerized workplace.

Study in areas such as keyboarding, oral and written communication, word processing, and machine transcription will enable the individual to function effectively as a receptionist, general office technician, or computer operator.

*ASSET test and completion of any identified developmental courses are required prior to enrollment in this program.*

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
ENG	114	Prof Research & Report	3	0	0	0	3
		Natural Science <b>OR</b>					
		Math 110 or higher	3	0	0	0	3
<b>Major Courses</b>							
ACC	115	College Acct.	3	2	0	0	4
BUS	260	Business Communications	3	0	0	0	3
CIS	110	Introduction to Computers	2	2	0	0	3
OST	131	Keyboarding	1	2	0	0	2
OST	132	Keyboard Skill Building	1	2	0	0	2
OST	134	Text Entry/Formatting	2	2	0	0	3
OST	136	Word Processing	1	2	0	0	2
OST	164	Text Editing Applications	3	0	0	0	3
OST	184	Records Management	1	2	0	0	2
OST	236	Adv. Word/Info Process.	2	2	0	0	3
OST	286	Professional Development	3	0	0	0	3
OST	289	Office Systems Mgt.	2	2	0	0	3

Total Semester Hours Credit: 42

Course credits (OST and CIS) earned over five years ago will not apply toward the diploma in Office Systems Technology-General.

The courses taken in this Diploma may be applied toward the Office Systems Technology associate degree program.

Medical Transcription  
Diploma  
(D25320)

The Medical Transcription curriculum prepares individuals to become medical language specialists who interpret and transcribe dictation by physicians and other healthcare professionals in order to document patient care and facilitate delivery of healthcare services.

Students will gain extensive knowledge of medical terminology, pharmacology, human diseases, diagnostic studies, surgical procedures, and laboratory procedures. In addition to word processing skills and knowledge of voice processing equipment, students must master English grammar, spelling, and proofreading.

Graduates should qualify for employment in hospitals, medical clinics, doctors' offices, private transcription businesses, research facilities, insurance companies, and publishing companies. After acquiring work experience, individuals can apply to the American Association for Medical Transcription to become a Certified Medical Transcriptionist.

*Asset test and completion of any identified developmental courses are required prior to enrollment in the Diploma program.*

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
BIO	163	Basic Anatomy and Physiology	4	2	0	0	5
ENG	111	Expository Writing	3	0	0	0	3
<b>Major Hours</b>							
MED	270	Symptomatology	2	2	0	0	3
MED	272	Drug Therapy	3	0	0	0	3
OST	131	Keyboarding	1	2	0	0	2
OST	132	Keyboard Skill Building	1	2	0	0	2
OST	136	Word Processing	1	2	0	0	2
OST	141	Medical Terminology I	3	0	0	0	3
OST	142	Medical Terminology II	3	0	0	0	3
OST	149	Medical Legal Issues	3	0	0	0	3
OST	164	Text Editing Applications	3	0	0	0	3
OST	201	Medical Transcription I	3	2	0	0	4
OST	202	Medical Transcription II	3	2	0	0	4
OST	203	Fundamentals of Medical Doc	3	0	0	0	3
OST	236	Adv Word/Info Processing	2	2	0	0	3

Total Semester Hours 46

Course credits (OST and CIS) earned over five years ago will not apply toward the Diploma in Medical Transcription.

Most courses taken in this Diploma may be applied toward the Medical Office Administration Associate Degree program.



# **Practical Nursing Diploma D45660**

The Practical Nursing curriculum prepares individuals with the knowledge and skills to provide nursing care to children and adults.

Students will participate in assessment, planning, implementing, and evaluating nursing care.

Graduates are eligible to apply to take the National Council Licensure Examination (NCLEX-PN) which is required for practice as a Licensed Practical Nurse. Employment opportunities include hospitals, rehabilitation/long term care/home health facilities, clinics, and physicians' offices.

## **PROGRAM INFORMATION**

Students applying for admission to Gaston College Practical Nursing program **MUST** meet the requirements for **GENERAL ADMISSION** to the college:

1. Complete general admission application.
2. Completion of ASSET (required if student has not completed developmental or college level English and math). **EXCEPTION:** The ASSET test may be waived of any person who has scored 520 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT.
3. Submit official transcript of high school grades with graduation date or GED scores.
4. Submit official college transcript(s), when applicable.
5. Applicants from countries whose language is not English must demonstrate proficiency in the English language by scoring no less than 540 on the Test of English as a Foreign Language (TOEFL).

## **ADDITIONAL REQUIREMENTS TO BE ELIGIBLE TO SUBMIT AN APPLICATION TO THE PRACTICAL NURSING PROGRAM:**

1. Must submit a minimum composite score of 16 on the American College Test (ACT) or 810 on the Scholastic Aptitude Test (SAT). The highest Verbal & Math scores on the SAT will be taken. Must be taken within 5 years of date of application.
2. Must have grades of "C" or better in all required college courses.
3. Required course in Anatomy & Physiology must be taken within 10 years of making application.
4. Current Adult & Infant CPR certification required prior to entrance to program.
5. Must submit a satisfactory "Criminal Record Check" or a notarized statement stating no record exists from the Clerk of Superior Court of the county court house in his/her county of residence. If there have been allegations of a misdemeanor(s) or felony(s) lodged against the applicant from another county,

the applicant must present a notarized “Criminal Record Check” from the county in which the allegations were made. Any allegations or charges of a misdemeanor(s) or felony(s) that occur after the Criminal Record Check has been turned in must be reported to the Department Chairperson immediately.

The following criteria will be utilized by the Admissions Committee in the selection process of recommending applicants to the Nursing Faculty for admission to the program:

- 1. ACT/SAT score
- 2. Number of required courses completed by end of the Fall Semester prior to entering program.
- 3. Grade Point Average (GPA) in required courses only.

The selection of applicants into the Program is based on the above criteria. The final selection of applicants into the program is made by the Nursing Faculty.

A completed health form documenting satisfactory emotional and physical health is required before entrance into the program by date to be announced by Nursing Department Chairperson.

Individuals interested in additional information about the Practical Nursing Program should contact Beverly Davis, Chairperson Practical Nursing Program at 704-748-1062 or 704-748-1063.

**Practical Nursing  
D45660**

			Title	Class	Lab	Clinical	Credit
<b>First Semester</b>							
<u>PSY</u>	<u>110</u>		<u>Life Span Development</u>	3	0	0	3
<u>BIO</u>	<u>163</u>		<u>Anatomy &amp; Physiology</u>	4	2	0	5
NUR	101		Practical Nursing I	7	6	6	11
NUR	118		Nutrition/Diet Therapy	<u>2</u>	<u>0</u>	<u>0</u>	<u>2</u>
Semester Total				16	8	6	21
<b>Second Semester</b>							
<u>ENG</u>	<u>111</u>		<u>Expository Writing</u>	3	0	0	3
NUR	102		Practical Nursing II	8	0	12	12
NUR	117		Pharmacology	<u>1</u>	<u>3</u>	<u>0</u>	<u>2</u>
Semester Total				12	3	12	17
<b>Third Semester</b>							
NUR	103		Practical Nursing III	<u>6</u>	<u>0</u>	<u>12</u>	<u>10</u>
Semester Total				6	0	12	10

Total Credit Hours for Graduation 48

Required non-nursing courses are underlined.



# Welding Technology

## Diploma

### (D50A20)

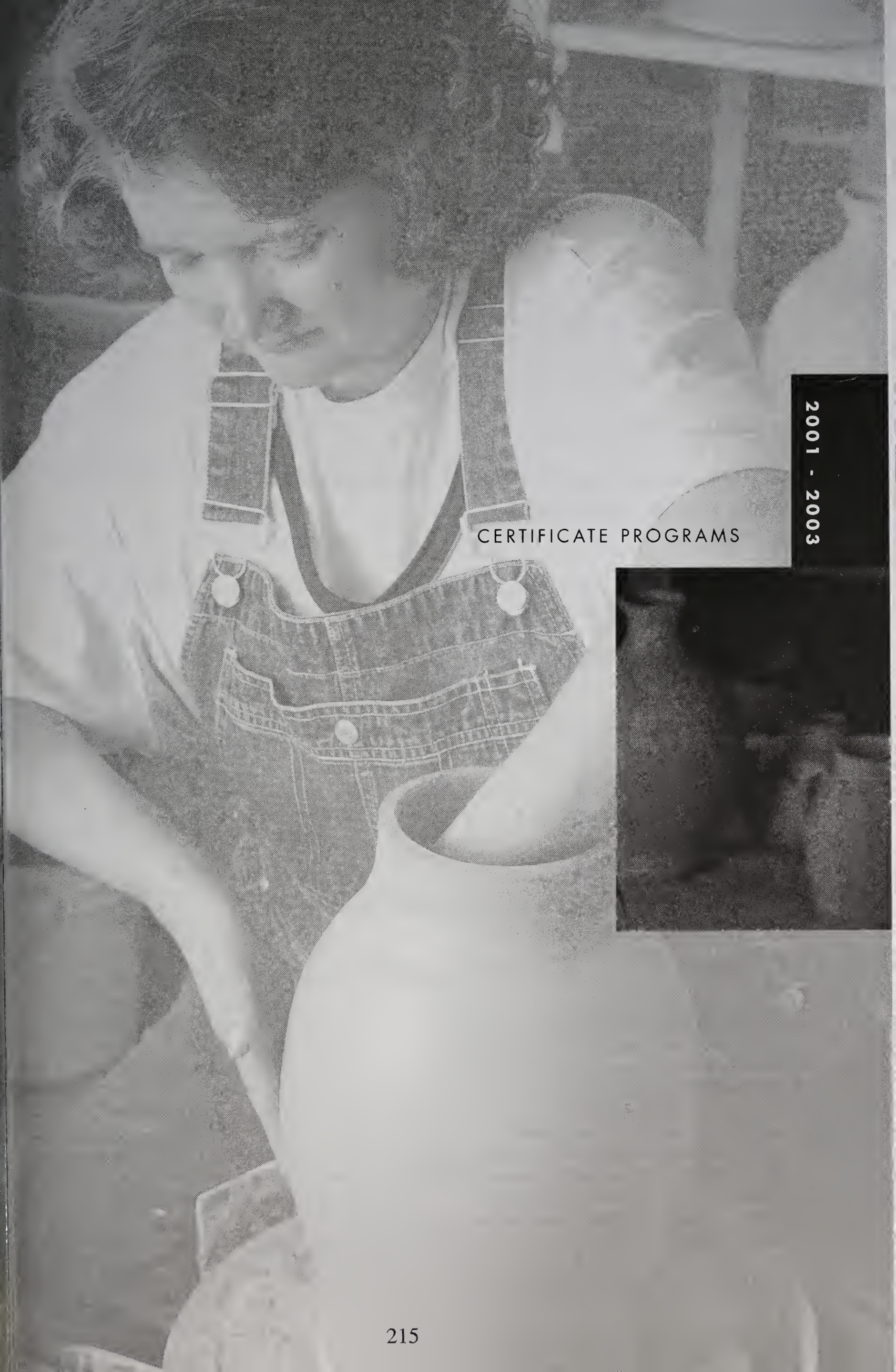
The Welding Technology Curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and nondestructive testing provide the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology curriculum may be employed as entry level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
ENG	101	Applied Comm I	3	0	0	0	3
MAT	101	Applied Mathematics I	2	2	0	0	3
<b>Major Courses</b>							
BPR	Ill	Blueprint Reading	1	2	0	0	2
WLD	110	Cutting Processes	1	3	0	0	2
WLD	115	SMAW (Stick) Plate	2	9	0	0	5
WLD	116	SMAW (Stick) Plate/Pipe	1	9	0	0	4
WLD	121	GMAW (MIG)FCAW/Plate	2	6	0	0	4
WLD	131	GTAW (TIG) Plate	2	6	0	0	4
WLD	141	Symbols & Specifications	2	2	0	0	3
WLD	151	Fabrication I	2	6	0	0	4
WLD	261	Certification Practices	1	3	0	0	2
Total Semester Hour Credits:							36





CERTIFICATE PROGRAMS

2001 - 2003



**Air Conditioning, Heating & Refrigeration**  
**Heating Certificate**  
**(C35100)**

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the air condition industry.

The courses taken in this certificate program count as credit toward the air condition diploma level program..

		Title	Class	Lab	Clinical	Work	Credits
AHR	112	Heating Technology	2	4	0	0	4
ELC	111	Introduction to Elec	2	2	0	0	3
AHR	130	HVAC Controls	2	2	0	0	3
AHR	140	All Weather Systems I	3	0	0	0	2

Total Semester Hours Credit: 12

**Air Conditioning, Heating & Refrigeration**  
**Heat Pump Certificate**  
**(C35100)**

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the air condition industry.

The courses taken in this certificate program count as credit toward the air condition diploma level program.

		Title	Class	Lab	Clinical	Work	Credits
AHR	110	Intro to Refrigeration	2	6	0	0	5
ELC	111	Introduction to Electricity	2	2	0	0	3
AHR	130	HVAC Controls	2	2	0	0	3
AHR	133	HVAC Servicing	3	0	0	0	2
AHR	160	Refrigerant Certification	1	0	0	0	1

Total Semester Hours Credit: 16

**Air Conditioning, Heating & Refrigeration**  
**Cooling Certificate**  
**(C35100)**

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the air condition industry.

The courses taken in this certificate program count as credit toward the air condition diploma level program.

		Title	Class	Lab	Clinical	Work	Credits
AHR	110	Intro to Refrigeration	2	6	0	0	5
ELC	111	Introduction to Electricity	2	2	0	0	3
AHR	130	HVAC Controls	2	2	0	0	3
AHR	114	Heat Pump Technology	2	4	0	0	4
AHR	160	Refrigerant Certification	1	0	0	0	1

Total Semester Hours Credit: 16

**Architectural Technology - CAD  
Certificate  
(C40100)**

The purpose of this certificate is to provide an opportunity for individuals who want to fulfill professional or general interest needs.

The courses taken in this certificate program count as credit toward the full Architectural Technology A.A.S. degree.

Title			Class	Lab	Clinical	Work	Credits
ARC	114	Arch CAD	1	3	0	0	2
ARC	220	Advanced Arch CAD	1	3	0	0	2
ARC	221	Arch 3-D CAD	1	4	0	0	3
CSC	129	Technical Programming	2	3	0	0	3
EGR	115	Intro to Technology	2	6	0	0	4
Total Semester							14

**Architectural Technology  
Certification  
(C40100)**

The purpose of this certificate is to provide an opportunity for individuals who want to fulfill professional or general interest needs.

The courses taken in this certificate program count as credit toward the full Architectural Technology A.A.S. degree.

EGR	115	Intro to Technology	2	6	0	4
ENG	111	Expository Writing	3	0	0	3
MAT	121	Algebra & Trig	2	2	0	3
ARC	111	Intro to Arch Technology	1	6	0	3
ARC	114	Architectural CAD	1	3	0	2
TOTAL HOURS						15

**Architectural Technology-Residential  
Certificate  
(C40100)**

The purpose of this certificate is to provide an opportunity for individuals who want to fulfill professional or general interest needs.

The courses taken in this certificate program count as credit toward the full Architectural Technology A.A.S. degree.

ARC	114	Architectural CAD	1	3	0	2
ARC	111	Intro to Arch Technology	1	6	0	3
ARC	112	Constr Materials/Methods	3	2	0	4
ARC	113	Residential Arch Tech	1	6	0	3
TOTAL HOURS						12



# Automotive Engines and Power Trains

## Certificate

### (C60160)

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the automotive industry.

It is recommended that students have the necessary math and reading skills before enrollment in this program.

The courses taken in this certificate program can be counted toward the automotive diploma or A.A.S. program.

		Title	Class	Lab	Clinical	Work	Credits
AUT	115	Engine Fundamentals	2	3	0	0	3
AUT	116	Engine Repair	1	3	0	0	2
AUT	231	Manual Drive Trains/Axles	2	3	0	0	4
AUT	221	Automatic Transmissions	2	6	0	0	4
Total Semester Hours Credit:							13

# Automotive Fuel and Electrical Systems

## Certificate

### (C60160)

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the automotive industry.

It is recommended that students have the necessary math and reading skills before enrollment in this program.

The courses taken in this certificate program can be counted toward the automotive diploma or A.A.S. program.

		Title	Class	Lab	Clinical	Work	Credits
AUT	163	Automotive Electronics	2	3	0	0	3
AUT	161	Electrical Systems	2	6	0	0	4
AUT	182	Engine Performance Fuels	2	6	0	0	4
AUT	181	Engine Performance Elect.	2	6	0	0	4
Total Semester Hours Credit:							15

# **Basic Computer Skills Certificate (C25260)**

The primary objective of the Certificate in Basic Computer Skills is to offer computer literacy and knowledge. This objective will be accomplished through the study of the various application packages currently being used on microcomputers today.

		Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>							
CIS	110	Introduction to Computers	2	2	0	0	3
CIS	120	Spreadsheet I	2	2	0	0	3
CIS	147	Operating Sys. - Windows	2	2	0	0	3
CIS	152	Database Concepts & App	2	2	0	0	3
CIS	172	Intro. to the Internet	2	3	0	0	3
*OST	136	Word Processing	1	2	0	0	2

Total Semester Hours Credit: 17

Course credits earned over five years ago will not apply toward the Certificate in Basic Computer Skills.

\* Requires OST 131 (Keyboarding) or proof of touch keyboarding skills.



## **Basic Law Enforcement Training Certificate (C55120)**

Basic Law Enforcement Training (BLET) is designed to give students essential skills required for entry-level employment as law enforcement officers with state, county, or municipal governments, or with private enterprise.

### **Basic Law Enforcement Training\ Admission Requirements**

1. Student must be twenty (20) years old at the time of course registration.
2. Student must be a high school graduate or equivalent.
3. Student is required to have a personal interview with the Criminal Justice Academy Director.
4. Student should present a letter of recommendation or sponsorship from the chief/sherriff of a police department, but not a requirement.
5. Student must present a clean criminal record report (no felonies).
6. Student must complete a Nelson-Denny (Reading Test) administered by the Counseling staff of Gaston College prior to enrollment. Contact Ms. Judy Yates at 704-922-6221 for an appointment to schedule your reading test.
7. Student must present a valid N.C. Drivers License.

\*Priority admission is granted to those individuals holding full-time employment with criminal justice agencies.

# Basic Law Enforcement Training

		Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>							
CJC	100	Basic Law Enforc Training	9	27	0	0	18
Total Semester Hour Credits							18

## Day & Evening BLET Program Course List

1.	Course Orientation	.2
2.	Physical Fitness Training	.54
3.	Ethics for Professional Law Enforcement	.4
4.	Arrest, Search and Seizure/Constitutional Law	.28
5.	Elements of Criminal Law	.24
6.	Communications Skills for Law Enforcement Officers	.8
7.	Law Enforcement Radio Procedures & Information Systems	.8
8.	Field Notetaking and Report Writing	.12
9.	Interviews: Field and In-Custody	.16
10.	Subject Control/Arrest Techniques	.40
11.	Juvenile Laws and Procedures	.8
12.	Fingerprinting & Photographing Arrests	.6
13.	Dealing with Victims/Public	.10
14.	Firearms	.48
15.	Criminal Investigation	.32
16.	ABC Laws and Procedures	.4
17.	Motor Vehicle Laws	.20
18.	Law Enforcement Driver Training	.40
19.	Crime Prevention Techniques	.6
20.	First Responder	.40
21.	Domestic Violence Response	.12
22.	Controlled Substances	.10
23.	Techniques of Traffic Law Enforcement	.24
24.	In-Custody Transportation	.8
25.	Traffic Accident Investigation	.20
26.	Explosives & Hazardous Materials Emergencies	.12
27.	Individuals with Mental Illness & Mental Retardation	.8
28.	Crowd Management	.12
29.	Preparing for Court & Testifying in Court	.12
30.	Patrol Techniques	.20
31.	Sherriff's Responsibilities: Detention Duties	.4
32.	Sherriff's Responsibilities: Court Duties	.6
33.	Civil Process	.24
34.	Testing	.7
Total		.602



# Civil Engineering Technology

## Certificate

### (C40140)

The primary objective of the Certificate Program of the Civil Engineering Technology curriculum is to introduce students to the employment opportunities in civil engineering technology generally and to surveying in particular. The objective is fulfilled through the study and application of civil engineering technology courses. All courses in the certificate can be used in the Civil Engineering Technology Associate in Applied Science Degree program.

This program can be completed using a day sequence.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
MAT	121	Algebra & Trigonometry I	2	2	0	0	3
<b>Major Courses</b>							
CIV	230	Construction Estimating	2	3	0	0	3
	or						
CIV	240	Project Management	2	3	0	0	3
CSC	129	Technical Programming	2	3	0	0	3
EGR	115	Intro to Technology	2	6	0	0	4
SRV	110	Surveying I	2	6	0	0	4
Total Semester Hour Credits:							17

# Computerized Accounting Certificate (C25100)

The Computerized Accounting Certificate is designed to provide students with the basic knowledge and skills necessary to utilize a computer to record accounting transactions using general ledger accounting software and also to utilize spreadsheet software for accounting applications.

In addition to course work in accounting principles, theories and practices students will complete a course in computer fundamentals and an introductory course in accounting spreadsheets utilizing Microsoft Excel.

The courses taken in this certificate program may be applied toward the Associate of Applied Science Degree in Accounting.

			Title	Class	Lab	Credits
Major Courses						
ACC	120	Principles of Accounting I		3	2	4
ACC	121	Principles of Accounting II		3	2	4
ACC	149	Introduction to Accounting Spreadsheets		1	2	2
CIS	110	Introduction to Computers		2	2	3
Total Semester Hours						13



# **Early Childhood Associate Infants/Toddler Certificate (C55220A)**

		Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>							
EDU	111	Early Childhood Cred. I	2	0	0	0	2
EDU	112	Early Childhood Cred. II	2	0	0	0	2
Or							
EDU	119	Early Childhood Ed.	3	2	0	0	4
EDU	146	Child Guidance	3	0	0	0	3
EDU	153	Health, Safety, and Nutr.	3	0	0	0	3
EDU	234	Infants, Toddlers, & Two	3	0	0	0	3
EDU	131	Child, Family & Com.	3	0	0	0	3
<b>Total Semester Hours Credit:</b>							<b>16</b>

# **Early Childhood Associate Administration Certificate (C55220B)**

		Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>							
EDU	111	Early Childhood Cred. I	2	0	0	0	2
EDU	112	Early Childhood Cred. II	2	0	0	0	2
Or							
EDU	119	Early Childhood Ed.	3	2	0	0	4
EDU	146	Child Guidance	3	0	0	0	3
EDU	153	Health, Safety, and Nutr.	3	0	0	0	3
EDU	261	Early Childhood Admin. I	2	0	0	0	2
EDU	262	Early Childhood Adm. II	3	0	0	0	3
EDU	288	Advanced Issues	2	0	0	0	2
<b>Total Semester Hours Credit:</b>							<b>17</b>

# **Early Childhood Associate Early Childhood Certificate (C55220C)**

		Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>							
EDU	111	Early Childhood Cred. I	2	0	0	0	2
EDU	112	Early Childhood Cred. II	2	0	0	0	2
Or							
EDU	119	Early Childhood Ed.	3	2	0	0	4
EDU	146	Child Guidance	3	0	0	0	3
EDU	153	Health, Safety, and Nutr.	3	0	0	0	3
EDU	185	Cognitive & Language Act.	3	0	0	0	3
EDU	185A	Cog. & Lang. Act. Lab	0	2	0	0	1
EDU	155	Art and Drama for Child.	1	2	0	0	2
<b>Total Semester Hours Credit:</b>							<b>16</b>

# **Early Childhood Associate School Age Certificate (C55220D)**

		Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>							
EDU	111	Early Childhood Cred. I	2	0	0	0	2
EDU	112	Early Childhood Cred. II	2	0	0	0	2
Or							
EDU	119	Early Childhood Ed.	3	2	0	0	4
EDU	146	Child Guidance	3	0	0	0	3
EDU	153	Health, Safety, and Nutr.	3	0	0	0	3
EDU	235	School Age Development	2	0	0	0	2
PSY	245	Child Development II	3	0	0	0	3
EDU	280	Literacy Experiences	3	0	0	0	3
<b>Total Semester Hours Credit:</b>							<b>18</b>

# **Early Childhood Associate Special Needs Certificate (C55220E)**

		Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>							
EDU	111	Early Childhood Cred. I	2	0	0	0	2
EDU	112	Early Childhood Cred. II	2	0	0	0	2
Or							
EDU	119	Early Childhood Ed.	3	2	0	0	4
EDU	146	Child Guidance	3	0	0	0	3
EDU	153	Health, Safety, and Nutr.	3	0	0	0	3
EDU	221	Children w/ Special Needs	3	0	0	0	3
EDU	185	Child, Family, & Com.	3	0	0	0	3
<b>Total Semester Hours Credit:</b>							<b>16</b>



# Electronics Engineering Technology Certificate (C40200)

The primary objective of the Certificate Program of the Electronics Engineering Technology curriculum is to introduce students to the employment opportunities in electronics engineering technology. The objective is fulfilled through the study and application of electronics engineering technology courses. All courses in the certificate can be used in the Electronics Engineering Technology Associate in Applied Science Degree program.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
<b>Major Courses</b>							
EGR	115	Introduction to Technology	2	6	0	0	4
ELC	131	DC/AC Circuit Analysis	4	3	0	0	5
ELN	133	Digital Electronics	3	3	0	0	4
Total Semester Hours Credit							16

# Emergency Medical Technician - Intermediate Certificate

## (C45340)

This certificate is designed for the individual that is interested in North Carolina Office of Emergency Medical Services - EMT Intermediate Certification. The courses taken in this certificate program count as credit toward the full Emergency Medical Science A.A.S. degree, provided the NCOEMS certification remains current.

### Specific EMS Program Requirements

1. Applicant must hold a current/valid driver's license.
2. A minimum grade of "C" (80%) in each Emergency Medical Science course (EMS prefix) is required in order to pass each course and to remain in the program. Readmission will be considered on an individual and space available basis.
3. In addition to meeting the college admission requirements, applicants to the Associate Degree Emergency Medical Science Program must meet the following:
  - a. Complete APPLICATION FOR EMS PROGRAMS - obtainable from the EMS department chairperson.
  - b. Must submit a physician's statement, including record of immunizations and physical and emotional status (forms available from the EMS Department).
  - c. Hepatitis B Vaccine (HBV) series must be completed before beginning any clinical experience. Also accepted: (1) documentation of prior series completion, or (2) waiver of vaccine from a physician.
  - d. Schedule an appointment with the program chairperson for a formal interview for entry into the EMS program.
4. Professional liability insurance is REQUIRED for students in the EMS Program and is arranged through the EMS Department. The insurance is renewed every year and must be paid BEFORE beginning any clinical experiences.
5. Applicants from countries whose language is not English will be required to demonstrate proficiency in the English language by scoring no less than 540 on the Test of English as a Foreign Language (TOEFL). United States resident applicants whose primary spoken language is not English will be required to demonstrate proficiency in the English language. This may include scoring no less than 540 on the TOEFL. The Department Chairperson of the Health program being applied for, in consultation with the Dean of Health and Business, will determine the means of demonstrating proficiency on an individual basis.

			Class	Lab	Clinic	Credit
EMS	110	EMT-Basic	5	3	0	6
EMS	111	Prehospital Environment	2	2	0	3
EMS	120	Intermediate Interventions	2	3	0	3
EMS	121	EMS Clinical Practicum	0	0	6	2
EMS	130	Pharmacology I for EMS	1	2	0	2
EMS	131	Advanced Airway Management	1	2	0	2

Total Semester Hour Credits 18



**Federal Income Tax  
Certificate  
(C25100)**

The Federal Income Tax Certificate is designed to provide students with the basic knowledge and skills necessary to prepare federal income tax returns.

In addition to course work in accounting principles, theories and practices students will complete two courses in federal income taxation and an introductory course in accounting spreadsheets utilizing Microsoft Excel.

The courses taken in this certificate program may be applied toward the Associate of Applied Science Degree in Accounting.

Title			Class	Lab	Credits
ACC	120	Principles of Accounting I	3	2	4
ACC	121	Principles of Accounting II	3	2	4
ACC	129	Individual Income Taxes	2	2	3
ACC	130	Business Income Taxes	2	2	3
ACC	149	Introduction to Accounting Spreadsheets	1	2	2
Total Semester Hours					16

# Industrial Engineering Technology

## Certificate

### (C4024O)

The Industrial Engineering Technology curriculum prepares graduates to perform as technical leaders in manufacturing and service organizations. The curriculum incorporates the study and application of methods and techniques for developing, implementing and improving integrated systems involving people, material, equipment and information.

The objectives of the Industrial Engineering Technology Certificate Program are to introduce students to industrial engineering quality and productivity improvement techniques and to enhance the training of currently employed manufacturing and service employees.

The objectives are fulfilled through the study and application of industrial engineering techniques including process analysis, SPC, safety training and productivity analysis.

All courses in the Certificate Program can be applied to the TAC/ABET-accredited Associate in Applied Science degree in Industrial Engineering Technology. The program can be completed using either a day or evening sequence.

			Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>								
DFT	170	Engineering Graphics	2	2	0	0	3	
ISC	112	Industrial Safety	2	0	0	0	2	
ISC	132	Mfg Quality Control	2	3	0	0	3	
ISC	136	Productivity Analysis I	2	3	0	0	3	
ISC	236	Productivity Analysis II	2	3	0	0	3	
MAT	121	Algebra/Trigonometry I	2	2	0	0	3	
Total Semester Hour Credits								17



# Industrial Maintenance Technology

## Certificate

### (C50240)

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the Industrial Maintenance field.

The courses taken in this certificate program count as credit toward the full Industrial Maintenance diploma program.

		Title	Class	Lab	Clinical	Work	Credits
BPR	111	Blueprint Reading	1	2	0	0	2
ELC	111	Intro to Electricity	2	0	0	0	3
HYD	110	Hydraulics/Pneumatics 1	2	3	0	0	3
MEC	111	Machine Processes 1	2	3	0	0	3
NINT	110	Intro to Maint Practices	1	3	0	0	2
WLD	112	Basic Welding Processes	1	3	0	0	2

Total Semester Hour Credits: 15

# Industrial Management Technology

## Certificate

### (C50260)

The Industrial Management Technology curriculum is designed to equip students with the knowledge, skills, and abilities to function effectively in staff, front-line leadership, and mid-level management positions in organizations. The program emphasizes team building, TQM, SPC, motivation, continuous improvement, systems, and leadership.

The objectives of the Industrial Management Technology Certificate Program are to introduce students to industrial management practices and to enhance the training of currently employed individuals in leadership and management skills.

The objectives are fulfilled through the study and application of industrial management techniques including inventory management, production planning and management processes.

All courses in the Certificate Program can be applied to the Associate in Applied Science degree in Industrial Management Technology. The program can be completed using either a day or evening sequence.

		Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>							
ISC	112	Industrial Safety	2	0	0	0	2
ISC	128	Industrial Leadership	2	0	0	0	2
ISC	135	Prin of Industrial Mgmt	3	0	0	0	3
ISC	243	Prod & Oper Mgmt I	2	3	0	0	3
ISC	244	Prod & Oper Mgmt II	2	3	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
Total Semester Hour Credits:							16



# Machining Technology

## Certificate

### (C50300)

#### Manual Machine Operation 1

This curriculum is designed to give an individual entry level skill needed to gain employment as a machinist or (CNC) Computer Numerical Control programmer.

It is recommended that students have the necessary math and reading skills before enrollment in this program.

The courses taken in this certificate program can be counted toward the machinist diploma or A.A.S. program.

		Title	Class	Lab	Credits
BPR	111	Blueprint Reading	1	2	2
MAC	111	Machining Technology I	2	12	6
MAC	114	Introduction to Metrology	2	0	2
MAC	121	Intro to CNC (1st 8 weeks)	<u>2</u>	<u>0</u>	<u>2</u>
			7	14	12

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# Machining Technology

## Certificate

### (C50300)

#### Basic Tool and Diemaking

This curriculum is designed to give an individual entry level skill needed to gain employment as a machinist or (CNC) Computer Numerical Control programmer.

It is recommended that students have the necessary math and reading skills before enrollment in this program.

The courses taken in this certificate program can be counted toward the machinist diploma or A.A.S. program.

		Title	Class	Lab	Credits
MAC	113	Machining Technology III	2	12	6
MAC	231	CNC Graphics Prog Turn	1	4	3
MAC	232	CNC Graphics Prog: Mill	1	4	3
MAC	243	Diemaking	<u>2</u>	<u>6</u>	<u>4</u>
			6	26	16

**Machining Technology**  
**Certificate**  
**(C50300)**  
**Basic Mold Construction and Injection Mold Operation**

This curriculum is designed to give an individual entry level skill needed to gain employment as a machinist or (CNC) Computer Numerical Control programmer.

It is recommended that students have the necessary math and reading skills before enrollment in this program.

The courses taken in this certificate program can be counted toward the machinist diploma or AAS program.

Title			Class	Lab	Credits
MAC	224	Advanced CNC Milling	1	3	2
MAC	231	CNC Graphics Prog: Turning	1	4	3
MAC	232	CNC Graphics Prog: Milling	1	4	3
MAC	245	Mold Construction	<u>2</u>	<u>6</u>	<u>4</u>
			5	17	12

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**Machining Technology**  
**Certificate**  
**(C50300)**  
**CNC Turning and Manual Machine Operation**

This curriculum is designed to give an individual entry level skill needed to gain employment as a machinist or (CNC) Computer Numerical Control programmer.

It is recommended that students have the necessary math and reading skills before enrollment in this program.

The courses taken in this certificate program can be counted toward the machinist diploma or A.A.S. program.

Title			Class	Lab	Credits
BPR	111	Blueprint Reading	1	2	2
MAC	111A	Machining Technology I	1	4	2
MAC	114	Introduction to Metrology	2	0	2
MAC	121	Intro to CNC	2	0	2
BPR	121	Blueprint Reading:Mechanical	1	2	2
MAC	122	CNC Turning	1	3	2
MAC	222	Advanced CNC Turning	<u>1</u>	<u>3</u>	<u>2</u>
			9	14	14



**Machining Technology  
Certificate  
(C50300)  
Machining Tool Cooperative Work Experience and (CNC)  
Computer Numerical Control**

This curriculum is designed to give an individual entry level skill needed to gain employment as a machinist or (CNC) Computer Numerical Control programmer.

It is recommended that students have the necessary math and reading skills before enrollment in this program.

The courses taken in this certificate program can be counted toward the machinist diploma or A.A.S. program.

		Title	Class	Lab	Credits
COE	111	Co-Op Work Experience I	0	10	1
COE	121	Co-Op Work Experience II	0	10	1
COE	131	Co-Op Work Experience III	0	10	1
COE	211	Co-Op Work Experience IV	0	10	1
		OR			
COE	112	Co-Op Work Experience I	0	20	2
COE	122	Co-Op Work Experience II	0	20	2
MAC	121	Intro to CNC	2	0	2
MAC	122	CNC Turning	1	3	2
MAC	222	Advanced CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	2
MAC	224	Advanced CNC Milling	1	3	2
MAC	231	CNC Graphics Prog: Turning	1	3	2
MAC	232	CNC Graphics Prog: Milling	1	4	3
			8	59	19

**Machining Technology  
Certificate  
(C50300)  
(CNC) Computer Numerical Control and (CAM) Computer  
Aided Manufacturing**

This curriculum is designed to give an individual entry level skill needed to gain employment as a machinist or (CNC) Computer Numerical Control programmer.

It is recommended that students have the necessary math and reading skills before enrollment in this program.

The courses taken in this certificate program can be counted toward the machinist diploma or A.A.S. program.

MAC	121	Intro CNC	2	0	2
MAC	122	CNC Turning	1	3	2
MAC	222	Advanced CNC Turning	1	3	2
MAC	124	CNC Milling`	1	3	2
MAC	224	Advanced CNC Milling	1	3	2
MAC	231	CNC Graphics Prog; Turning	1	4	3
MAC	232	CNC Graphics Prog: Milling	1	4	3
			8	20	16
			7	17	14

# Mechanical Drafting Technology

## Mechanical Certificate CAD

### (C40320)

The purpose of this certificate is to provide an opportunity for individuals who want to fulfill professional or general interest needs.

The courses taken in this certificate program count as credit toward the full Mechanical Drafting Technology A.A.S. degree.

		Title	Class	Lab	Clinical	Work	Credits
CSC	129	Technical Programming	2	3	0	0	3
DFT	151	CAD I	2	3	0	0	3
DFT	152	CAD II	2	3	0	0	3
DFT	153	CAD III	2	3	0	0	3
MEC	145	Mfg Materials I	2	3	0	0	3

Total Semester Hour Credits: 15

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# Mechanical Drafting Technology

## Certificate

### (C50340)

The purpose of this certificate is to provide an opportunity for individuals who want to fulfill professional or general interest needs.

The courses taken in this certificate program count as credit toward the full Mechanical Drafting Technology A.A.S. degree.

MAT	121	Algebra/Trigonometry I			2	2	3
DFT	111	Tech Drafting I			1	3	2
DFT	111A	Tech Drafting-Lab			0	3	1
DFT	151	CAD I			2	3	3
EGR	115	Introduction to Tech			2	6	4
MEC	145	Mfg. Materials I			2	3	3

TOTAL SEMESTER HOURS CREDIT 16

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# Mechanical Drafting Technology Specialty

## Certificate

### (C50340)

The purpose of this certificate is to provide an opportunity for individuals who want to fulfill professional or general interest needs.

The courses taken in this certificate program count as credit toward the full Mechanical Drafting Technology A.A.S. degree.

DFT	152	CAD II			2	3	3
DFT	211	Gears, Cams, Pulleys			1	3	2
DFT	218	Industrial Sys Schematics			1	2	2
DFT	121	Intro to GD & T			1	2	2
DFT	243	Basic Die Design			2	6	4
MEC	210	Materials-Stress Analysis			1	2	2

TOTAL SEMESTER HOURS CREDIT 15



# Mechanical Engineering Technology

## Certificate

### (C40320)

The primary objective of the Certificate Program of the Mechanical Engineering Technology curriculum is to introduce students to the employment opportunities in mechanical engineering technology. The objective is fulfilled through the study and application of mechanical engineering technology courses. All courses in the certificate can be used in the Mechanical Engineering Technology Associate in Applied Science Degree program.

		Title	Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
<b>Major Courses</b>							
ATR	112	Intro to Automation	2	3	0	0	3
CSC	129	Technical Programming	2	3	0	0	3
DFT	111	Technical Drafting I	1	3	0	0	2
EGR	115	Introduction to Technology	2	6	0	0	4
MEC	145	Mfg Materials I	2	3	0	0	3
Total Semester Hours Credit							18

Medical Office Administration - Basic  
Certificate  
(C25310)

The courses taken in this certificate may be applied toward the Medical Office Administration degree program.

*ASSET test and completion of any identified developmental courses are required prior to enrollment in this certificate.*

Title			Class	Lab	Credits
Major Courses					
OST	131	Keyboarding	1	2	2
OST	132	Keyboard Skill Building	1	2	2
OST	136	Word Processing	1	2	2
OST	141	Medical Terminology I-Med Office	3	0	3
OST	142	Medical Terminology II - Med. Office	3	0	3
OST	149	Medical Legal Issues	3	0	3
OST	164	Text Editing Applications	3	0	3

Total Semester Hours Credit: 18

Course credits (OST) earned over five years ago will not apply toward the Certificate in Medical Office Administration-Basic or Intermediate.

Medical Office Administration - Intermediate  
Certificate  
(C25310)

This intermediate certificate program is designed to be taken after a student has finished the BASIC certificate.

Title			Class	Lab	Credits
Major Courses					
OST	134	Text Entry and Formatting	2	2	3
OST	135	Adv. Text Entry & Formatting	3	2	4
OST	148	Medical Coding, Billing & Insurance	3	0	3
OST	236	Adv. Word/Information Processing	2	2	3
OST	243	Medical Office Simulation	2	2	3

Total Semester Hours Credit: 16



**Nursing Assistant  
Certificate  
(CA5480)**

The Nursing Assistant curriculum prepares individuals to work under the supervision of licensed health care professionals in performing nursing care and services for persons of all ages.

Course work emphasizes growth and development throughout the life span, personal care, vital signs, communication, nutrition, medical aspects, therapeutic activities, accident and fire safety, household environment and equipment management; family resources and services; and employment skills.

Graduates of this curriculum may be eligible to be listed on the registry as a Nursing Assistant I and Nursing Assistant II. They may be employed in home health agencies, hospitals, clinics, nursing homes, extended care facilities, and doctors offices.

			Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>								
NAS	101		Nursing Assistant I	3	2	3	0	5
NAS	102		Nursing Assistant II	3	2	6	0	6
NAS	103		Home Health Care	2	0	0	0	2
Total Semester Hours Credit:								13

**ADMISSION INFORMATION**

Students applying for admission to the Gaston College Nursing Assistant Program must meet the following requirements for General Admission to the College.

1. Complete general admission application.
2. Submit official transcript of high school grades or GED scores.
3. Submit official college transcript(s) when applicable.
4. Applicants from countries whose language is not English must demonstrate proficiency in the English language by scoring no less than 540 on the Test of English as a Foreign Language (TOEFL).
5. Schedule and take the ASSET test for determining Math and English placement at Gaston College (this can be scheduled through the Admissions Office).  
Students must obtain a minimum score of 33 in Reading and 30 in Numerical Math. Individuals who have completed college level Math and English courses with a grade of “C” or higher do not have to take the ASSET. The ASSET test may be waived of any person who has scored 520 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT.

**Additional requirements:**

Students applying for admission to any Nursing Assistant Class must present a valid Social Security Card.

Students applying for the Nursing Assistant II program must be listed on the North Carolina Nurse Aide Registry.

Students applying for the Nursing Assistant II program must be a high school graduate or have completed their GED.

# Phlebotomy Certificate (CA5600)

The Phlebotomy curriculum prepares individuals to obtain blood and other specimens for the purpose of laboratory analysis. Course work includes proper specimen collection and handling, communication skills, and maintaining patient data. Graduates may qualify for employment in hospitals, clinics, physicians' offices, and other health care settings and may be eligible for national certification as phlebotomy technicians.

		Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>							
PBT	100	Phlebotomy Technology	5	2	0	0	6
PBT	101	Phlebotomy Practicum	0	0	9	0	3
PSY	150	General Psychology	3	0	0	0	3
Total Semester Hours Credit:							12

**Program Requirements** In addition to meeting the college admission requirements, applicants to the Phlebotomy Technology Program must meet the following criteria:

1. Must be a high school or GED graduate.
2. Attain a minimum composite score of 15 on the ACT examination to be considered for admission. Exam scores must be current within 5 years prior to entry. Individuals with a previous college degree will have the ACT examination waived with proof of graduation from an accredited college.
3. Complete application form for Phlebotomy Program. (These forms may be obtained from the Medical Assisting Department.)
4. Schedule a personal interview with the Director of Medical Assisting/Phlebotomy.
5. Submit a satisfactory physical examination report from physician indicating physical and emotional status. (Must be current within six months prior to entry into the program.)
6. Must complete the (series of three) Hepatitis B vaccine. Two of the immunizations must be completed prior to admission.
7. A minimum grade of "C" (80%) in each PBT course is required to earn the Phlebotomy Certificate.



- 8. Must submit a satisfactory "Criminal Record Check" or a notarized statement stating no record exists from the Clerk of Superior Court at the county courthouse in his/her county of residence. This must be submitted by the end of the first week of classes.
- 9. Take the ASSET examination. The ASSET test may be waived of any person who has scored 520 on the verbal section and 520 on the math section of the SAT or who has a composite score of 22 on the ACT.

The Phlebotomy Technology Program is limited to the number of students matching the number of internship spaces recruited. This usually means that 12 to 15 students can be accepted. Therefore, the top 12-15 qualifying admission scores will be accepted for program entry. Individuals not accepted must repeat the application process to be considered for admission to the next class.

NOTE: The semester sequence for the program will consist of a 10 week concentrated classroom experience followed by a 6 week internship experience.

**THE CLASSROOM/LABORATORY PHASE** will consist of a 10 week concentration on the courses listed below:

PBT	100	Phlebotomy Technology*
PSY	150	General Psychology *

\*These classes will meet M-W-F or T-TH between the hours of 8:00 a.m.-2:00 p.m.

**THE INTERNSHIP PHASE** (PBT 101: Phlebotomy Practicum) will provide the student the opportunity to apply the skills learned in the classroom/laboratory phase to the work environment, under supervision. Students will be assigned to either an area hospital laboratory, an independent laboratory, a medical clinic, or a physician's office laboratory for an eight-hour (8-hour) shift, 3 days a week for a total of 24 hours a week clinical experience. **Hours for the internship will vary according to the facility to which you will be assigned and may be any of the following sets of hours:**

- 5:00 am.-01:00 p.m.
- 6:00 a.m.-02:00 p.m.
- 7:00 a.m.-03:00 p.m.
- 8:00 a.m.-04:00 p.m.
- 8:30 a.m.-04:30 p.m.
- 2:30 p.m.-] 0:30 p.m.
- 3:00 p.m.-11:00 p.m.

NOTE: Applicants should apply to the Phlebotomy Program during the summer and early part of the fall semester. Interviews are conducted in October. **The Phlebotomy Program runs only once per year, in the spring semester.**

# **Production Technology Certificate (C40240)**

The Production Technology Certificate curriculum is designed to provide beginning students with the basic knowledge and skills to function effectively in introductory assignments in industry. A core of courses introduces the student to engineering technology and an understanding of production concepts.

The objective of the Production Technology Certificate program is to enhance the training of currently employed manufacturing and service employees in production fundamentals. The objective is fulfilled through the study of courses in engineering graphics, manufacturing processes, industrial safety and leadership.

All courses in the Production Technology Certificate program can be applied to the Associate in Applied Science degree in Industrial Management Technology or the Associate in Applied Science degree in Industrial Engineering Technology. The certificate program can be completed using either a day or evening sequence.

Title			Class	Lab	Clinical	Work	Credits
<b>General Education Courses</b>							
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
<b>Major Courses</b>							
DFT	170	Engineering Graphics	2	2	0	0	3
EGR	115	Introduction to Technology	2	6	0	0	4
ISC	112	Industrial Safety	2	0	0	0	2
ISC	128	Industrial Leadership	2	0	0	0	2
MEC	145	Mfg Materials I	2	3	0	0	3
Total Semester Hours Credit							17



# **Quality Engineering Technology Certificate (C40240)**

The Quality Engineering Technology Certificate program is intended to provide the student with a subset of the courses required in the Industrial Engineering Technology associate degree program. These six courses provide the technical and communication skills to meet the needs of manufacturing employees entering product and service quality fields in business and industry.

All courses in the Certificate Program can be applied to the Associate in Applied Science degree in Industrial Engineering Technology or Industrial Management Technology.

The program can be completed using either a day or evening sequence.

		Title	Class	Lab	Clinical	Work	Credits
<b>Major Courses</b>							
DFT	170	Engineering Graphics	2	2	0	0	3
ISC	132	Mfg Quality Control	2	3	0	0	3
ISC	237	Quality Management	2	3	0	0	3
MEC	145	Mfg Materials I	2	3	0	0	3
<b>General Education Courses</b>							
ENG	111	Expository Writing	3	0	0	0	3
MAT	121	Algebra/Trigonometry I	2	2	0	0	3
Total Semester Hour Credits:							18

# Welding Certificate

## C50420

This curriculum is designed to give the individual basic skills and related information needed to gain limited employment in the Welding field.

The courses taken in this certificate program count as credit toward the full Welding diploma program.

		Title	Class	Lab	Clinical	Work	Credits
BPR	111	Blueprint Reading	1	2	0	0	2
WLD	110	Cutting Processes	1	3	0	0	2
WLD	115	SMAW (Stick) Plate	2	9	0	0	5
WLD	116	SMAW (Stick) Plate/Pipe	1	9	0	0	4
WLD	121	GMAW (MIG) FCAW/Plate	2	6	0	0	4
WLD	131	GTAW (TIG) Plate	2	6	0	0	4
WLD	141	Symbols & Specifications	2	2	0	0	3
WLD	151	Fabrication I	2	6	0	0	4
WLD	261	Certification Practices	1	3	0	0	2

\*A student may choose any 12 semester credits from the above courses.







2001 - 2003

## COURSE DESCRIPTIONS





## Academic Related

### **ACA118 College Study Skills (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers skills and strategies designed to improve study behaviors. Topics include time management, note taking, test taking, memory techniques, active reading strategies, critical thinking, communication skills, learning styles, and other strategies for effective learning. Upon completion, students should be able to apply appropriate study strategies and techniques to the development of an effective study plan.

### **Accounting**

#### **ACC 115 College Accounting (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces basic accounting principles for a sole proprietorship. Topics include the complete accounting cycle with end-of-period statements, bank reconciliation, payrolls, and petty cash. Upon completion, students should be able to demonstrate an understanding of accounting principles and apply those skills to a business organization.

#### **ACC 120 Prin Of Accounting I (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces the basic principles and procedures of accounting. Emphasis is placed on collecting, summarizing, analyzing, and reporting financial information. Upon completion, students should be able to analyze data and prepare journal entries and reports as they relate to the accounting cycle. This course has been approved for transfer through the Comprehensive Articulation Agreement.

#### **ACC 121 Prin of Accounting II (3-2-0-4)**

Prerequisites: ACC 120

Corequisites: None

This course is a continuation of ACC 120. Emphasis is placed on corporate and managerial accounting for both external and internal reporting and decision making. Upon completion, students should be able to analyze and record corporate transactions, prepare financial statements and reports, and interpret them for management. This course has been approved for transfer through the Comprehensive Articulation Agreement.

#### **ACC 129 Individual Income Taxes (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the relevant laws governing individual income taxation. Emphasis is placed on filing status, exemptions for dependents, gross income, adjustments, deductions, and computation of tax. Upon completion, students should be able to complete various tax forms pertaining to the topics covered in the course.

#### **ACC 130 Business Income Taxes (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the relevant laws governing business and fiduciary income taxes. Topics include tax depreciation, accounting periods and methods, corporations, partnerships, S corporations, estates and trusts, and gifts. Upon completion, students should be able to complete various tax forms pertaining to the topics covered in the course.

#### **ACC 140 Payroll Accounting (1-2-0-2)**

Prerequisites: ACC 115 or ACC 120

Corequisites: None

This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages; calculating social security, income, and unemployment taxes; preparing appropriate payroll tax forms; and journalizing/posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries.

#### **ACC 149 Intro to Acct. Spreadsheets (1-2-0-2)**

Prerequisites: ACC 115 or ACC 120

Corequisites: None

This course provides a working knowledge of computer spreadsheets and their use in accounting. Topics include pre-programmed problems, model-building problems, beginning-level macros, graphics, and what-if analysis enhancements of template problems. Upon completion, students should be able to use a computer spreadsheet to complete many of the tasks required in accounting.

#### **ACC 151 Acct Spreadsheet Appl (1-2-0-2)**

Prerequisites: ACC 149

Corequisites: None

This course is designed to facilitate the use of spreadsheet technology as applied to accounting principles. Emphasis is placed on using spreadsheet software as a problem-solving and decision-making tool. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

#### **ACC 170 Technical Accounting (2-3-0-3)**

Prerequisites: MAT 121 or MAT 161

Corequisites: MAT 122

This course introduces the use of accounting for decision making and covers integration of financial accounting with managerial concepts. Topics include essentials of financial accounting and analysis, product costing, activity-based costing systems, budgeting, and financial planning. Upon completion, students should be able to understand and develop financial statements and demonstrate an understanding of accounting transactions and product costing systems.



**ACC 220 Intermediate Accounting I (3-2-0-4)**

Prerequisites: ACC 121

Corequisites: None

This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and statements and extensive analyzes of balance sheet components. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards

**ACC 221 Intermediate Acct II (3-2-0-4)**

Prerequisites: ACC 220

Corequisites: None

This course is a continuation of ACC 220. Emphasis is placed on special problems which may include leases, bonds, investments, ratio analyzes, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

**ACC 225 Cost Accounting (3-0-0-3)**

Prerequisites: ACC 121

Corequisites: None

This course introduces the nature and purposes of cost accounting as an information system for planning and control. Topics include direct materials, direct labor, factory overhead, process, job order, and standard cost systems. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

**ACC 226 Managerial Accounting (3-0-0-3)**

Prerequisites: ACC 121

Corequisites: None

This course is designed to develop an appreciation for the uses of cost information in the administration and control of business organizations. Emphasis is placed on how accounting data can be interpreted and used by management in planning and controlling business activities. Upon completion, students should be able to analyze and interpret cost information and present this information in a form that is usable by management.

**ACC 269 Auditing (3-0-0-3)**

Prerequisites: ACC 220

Corequisites: None

This course covers the overall framework of the process of conducting audits and investigations. Emphasis is placed on collecting data from working papers, arranging and systematizing the audit, and writing the audit report. Upon completion, students should be able to demonstrate competence in applying the generally accepted auditing standards and the procedures for conducting an audit.

**ACC 270 International Accounting (3-0-0-3)**

Prerequisites: ACC 120 and INT 220

Corequisites: None

This course includes identifying, recording, and interpreting financial information for accounting systems used in different countries. Topics include currency exchange rates, methods of setting and selecting transfer prices, practices used to account for rates of inflation, and major types of taxes. Upon completion, students should be able to describe accounting systems and their impacts on different currencies and demonstrate a basic knowledge of international accounting. This course is a unique concentration requirement in the International Business concentration in the Business Administration program.

**Air Conditioning, Heating and Refrigeration (Also see Electrical Installation and Maintenance ELC)****AHR 110 Intro, to Refrigeration (2-6-0-5)**

Prerequisites: None

Corequisites: None

This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

**AHR 112 Heating Technology (2-4-0-4)**

Prerequisites: None

Corequisites: None

This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.

**AHR 113 Comfort Cooling (2-4-0-4)**

Prerequisites: None

Corequisites: None

This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychometrics, manufacturer specifications, and test instruments to determine proper system operation.

**AHR 114 Heat Pump Technology (2-4-0-4)**

Prerequisites: AHR 110, AHR 113

Corequisites: None

This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigeration



erant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures.

**AHR 120 HVACR Maintenance (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the basic principles of industrial air conditioning and heating systems. Emphasis is placed on preventive maintenance procedures for heating and cooling equipment and related components. Upon completion, students should be able to perform routine preventive maintenance tasks, maintain records, and assist in routine equipment repairs.

**AHR 130 HVAC Controls (2-2-0-3)**

Prerequisites: AHR 111, ELC 111

Corequisites: None

This course covers the types of controls found in residential and commercial comfort systems. Topics include electrical and electronic controls, control schematics and diagrams, test instruments, and analysis and troubleshooting of electrical systems. Upon completion, students should be able to diagnose and repair common residential and commercial comfort system controls.

**AHR 133 HVAC Servicing (2-6-0-4)**

Prerequisites: None

Corequisites: AHR 112, AHR 113

The course covers the maintenance and servicing of HVAC equipment. Topics include testing, adjusting, maintaining, and troubleshooting HVAC equipment and record keeping. Upon completion, students should be able to adjust, maintain, and service HVAC equipment.

**AHR 140 All-Weather Systems (1-3-0-2)**

Prerequisites: AHR 112, AHR 113

Corequisites: None

This course covers the principles of combination heating and cooling systems including gas-electric, all-electric, and oil-electric systems. Topics include PTAC's and package and split-system units. Upon completion, students should be able to understand systems performance and perform routine maintenance procedures.

**AHR 160 Refrigerant Certification (1-0-0-1)**

Prerequisites: None

Corequisites: None

This course covers the requirements for the EPA certification examinations. Topics include small appliances, high pressure systems, and low pressure systems. Upon completion, students should be able to demonstrate knowledge of refrigerants and be prepared for the EPA certification examinations.

**AHR 211 Residential System Design (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the principles and concepts of conventional residential heating and cooling system design. Topics include heating and cooling load estimating, basic psychometrics, equipment selection, duct system selection, and system design.

Upon completion, students should be able to design a basic residential heating and cooling system.

**AHR 215 Commercial HVAC Controls (1-3-0-2)**

Prerequisites: AHR 111, ELC 111

Corequisites: None

This course introduces HVAC control systems used in commercial applications. Topics include electric/electronic control systems, pneumatic control systems, DDC temperature sensors, humidity sensors, pressure sensors, wiring, controllers, actuators, and controlled devices. Upon completion, students should be able to verify or correct the performance of common control systems with regard to sequence of operation and safety.

**Anthropology**

**ANT 210 General Anthropology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the physical, archaeological, linguistic, and ethnological fields of anthropology. Topics include human origins, genetic variations, archaeology, linguistics, primatology, and contemporary cultures. Upon completion, students should be able to demonstrate an understanding of the four major fields of anthropology. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.

**ANT 220 Cultural Anthropology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the nature of human culture. Emphasis is placed on cultural theory, methods of fieldwork, and cross-cultural comparisons in the areas of ethnology, language, and the cultural past. Upon completion, students should be able to demonstrate an understanding of basic cultural processes and how cultural data are collected and analyzed. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

**ANT 221 Comparative Cultures (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an ethnographic survey of societies around the world covering their distinctive cultural characteristics and how these relate to cultural change. Emphasis is placed on the similarities and differences in social institutions such as family, economics, politics, education, and religion. Upon completion, students should be able to demonstrate knowledge of a variety of cultural adaptive strategies. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.



**ANT 230 Physical Anthropology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the scientific study of human evolution and adaptation. Emphasis is placed on evolutionary theory, population genetics, biocultural adaptation and human variation, as well as non-human primate evolution, morphology, and behavior. Upon completion, students should be able to demonstrate an understanding of the biological and cultural processes which have resulted in the formation of the human species. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.

**ANT 240 Archaeology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the scientific study of the unwritten record of the human past. Emphasis is placed on the process of human cultural evolution as revealed through archaeological methods of excavation and interpretation. Upon completion, students should be able to demonstrate an understanding of how archaeologists reconstruct the past and describe the variety of past human cultures. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social[behavioral sciences.

**Architecture****ARC 111 Intro to Arch Technology (1-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces basic architectural drafting techniques, lettering, use of architectural and engineer scales, and sketching. Topics include orthographic, axonometric, and oblique drawing techniques using architectural plans, elevations, sections, and details; reprographic techniques; and other related topics. Upon completion, students should be able to prepare and print scaled drawings within minimum architectural standards.

**ARC 112 Constr Matls & Methods (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces construction materials and their methodologies. Topics include construction terminology, materials and their properties, manufacturing processes, construction techniques, and other related topics. Upon completion, students should be able to detail construction assemblies and identify construction materials and properties.

**ARC 113 Residential Arch Tech (1-6-0-3)**

Prerequisites: ARC 111

Corequisites: ARC 112

This course covers intermediate residential working drawings. Topics include residential plans, elevations, sections, details, schedules, and other related topics. Upon completion, students should be able to prepare a set of residential working drawings that are within accepted architectural standards.

**ARC 114 Architectural CAD (1-3-0-2)**

Prerequisites: ARC 111

Corequisites: None

This course introduces basic architectural CAD techniques. Topics include basic commands and system hardware and software. Upon completion, students should be able to prepare and plot architectural drawings to scale within accepted architectural standards.

**ARC 119 Structural Drafting (2-2-0-3)**

Prerequisites: ARC 113, MAT 121

Corequisites: None

This course introduces basic concepts associated with sizing and detailing structural assemblies. Topics include vocabulary, span-to-depth ratios, code requirements, shop drawings, and other related topics. Upon completion, students should be able to perform simple calculations and prepare shop drawings and preliminary structural plans.

**ARC 131 Building Codes (2-2-0-3)**

Prerequisites: ARC 112

Corequisites: None

This course covers the methods of researching building codes for specific projects. Topics include residential and commercial building codes. Upon completion, students should be able to determine the code constraints governing residential and commercial projects.

**ARC 141 Elem Structures for Arch (4-0-0-4)**

Prerequisites: ARC 111, MAT 121

Corequisites: None

This course covers concepts of elementary structures in architecture. Topics include structural form, statics, strength of materials, structural behavior, and the relationship between structures and architectural form. Upon completion, students should be able to size simple structural elements.

**ARC 211 Light Constr Technology (1-6-0-3)**

Prerequisites: ARC 111

Corequisites: ARC 112

This course covers working drawings for light construction. Topics include plans, elevations, sections, and details; schedules; and other related topics. Upon completion, students should be able to prepare a set of working drawings which are within accepted architectural standards.

**ARC 213 Design Project (2-6-0-4)**

Prerequisites: ARC 114, ARC 211

Corequisites: None

This course provides the opportunity to design and prepare a set of contract documents within an architectural setting. Topics include schematic design, design development, construction documents, and other related topics. Upon completion, students should be able to prepare a set of commercial contract documents.

**ARC 220 Adv Architect CAD (1-3-0-2)**

Prerequisites: ARC 114

Corequisites: None

This course provides file management, productivity, and CAD customization skills. Emphasis is placed on developing advanced proficiency tech-



niques. Upon completion, students should be able to create prototype drawings and symbol libraries, compose sheets with multiple details, and use advanced drawing and editing commands.

**ARC 221 Architectural 3-D CAD (1-4-0-3)**

Prerequisites: ARC 114

Corequisites: None

This course introduces architectural three dimensional CAD applications. Topics include three-dimensional drawing, coordinate systems, viewing, rendering, modeling, and output options. Upon completion, students should be able to prepare architectural three-dimensional drawings and renderings.

**ARC 230 Environmental Systems (3-3-0-4)**

Prerequisites: ARC 111, MAT 121

Corequisites: None

This course introduces plumbing, mechanical (HVAC), and electrical systems for the architectural environment. Topics include basic plumbing, mechanical, and electrical systems for residential and/or commercial buildings with an introduction to selected code requirements. Upon completion, students should be able to develop schematic drawings for plumbing, mechanical, and electrical systems and perform related calculations.

**ARC 241 Contract Administration (1-2-0-2)**

Prerequisites: ARC 111, ARC 112

Corequisites: None

This course covers the techniques for reviewing the progress of construction projects. Topics include site observations, field reports, applications for payment, change orders, and other related topics. Upon completion, students should be able to review construction progress and produce appropriate documentation.

**Art**

**ART 111 Art Appreciation (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**ART 114 Art History Survey I (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved to satisfy the Comprehensive Articulation Agreement general

education core requirement in humanities/fine arts.

**ART 115 Art History Survey II (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**ART 116 Survey of American Art (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers the development of American art forms from colonial times to the present. Emphasis is placed on architecture, painting, sculpture, graphics, and the decorative arts. Upon completion, students should be able to demonstrate understanding of the history of the American creative experience. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**ART 117 Non-Western Art History (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces non-Western cultural perspectives. Emphasis is placed on, but not limited to, African, Oriental, and Oceanic art forms throughout history. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of non Western social and cultural development. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**ART 121 Design I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the elements and principles of design as applied to two-dimensional art. Emphasis is placed on the structural elements, the principles of visual organization, and the theories of color mixing and interaction. Upon completion, students should be able to understand and use critical and analytical approaches as they apply to two-dimensional visual art. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 122 Design II (0-6-0-3)**

Prerequisites: ART 121

Corequisites: None

This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply three dimensional design concepts. This course has been approved for transfer through the Comprehensive Articulation Agreement.



**ART 131 Drawing I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 132 Drawing II (0-6-0-3)**

Prerequisites: ART 131

Corequisites: None

This course continues instruction in the language of drawing and the use of various materials. Emphasis is placed on experimentation in the use of drawing techniques, media, and graphic materials. Upon completion, students should be able to demonstrate increased competence in the expressive use of graphic form and techniques. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 135 Figure Drawing I (0-6-0-3)**

Prerequisites: ART 131

Corequisites: None

This course introduces rendering the human figure with various drawing materials. Emphasis is placed on the use of the visual elements, anatomy, and proportion in the representation of the draped and undraped figure. Upon completion, students should be able to demonstrate competence in drawing the human figure. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 171 Computer Art I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the use of the computer as a tool for solving visual problems. Emphasis is placed on fundamentals of computer literacy and design through bit-mapped image manipulation. Upon completion, students should be able to demonstrate an understanding of paint programs, printers, and scanners to capture, manipulate, and output images.

**ART 212 Gallery Assistantship I (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course covers the practical application of display techniques. Emphasis is placed on preparation of artwork for installation, hardware systems, and exhibition graphics. Upon completion, students should be able to demonstrate basic gallery exhibition skills. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 213 Gallery Assistantship II (0-2-0-1)**

Prerequisites: ART 212

Corequisites: None

This course provides additional experience in display techniques. Emphasis is placed on preparation of artwork for exhibition, alternative methods of installation, hardware systems, and exhibition graphics. Upon completion, students should be able

to demonstrate independent decision-making and exhibition expertise. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 214 Portfolio and Resume (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course covers resume writing, interview skills, and the preparation and presentation of an art portfolio. Emphasis is placed on the preparation of a portfolio of original artwork, the preparation of a photographic portfolio, approaches to resume writing, and interview techniques. Upon completion, students should be able to mount original art for portfolio presentation, photograph and display a professional slide portfolio, and write an effective resume. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 222 Wood Design I (0-6-0-3)**

Prerequisites: ART 132

Corequisites: None

This course introduces the historical and contemporary design concepts and their application to the construction of functional and sculptural wood forms. Emphasis is placed on the mastery of hand and power tools. Upon completion, students should be able to demonstrate appropriate use of tools to create unique designs. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 223 Wood Design (0-6-0-3)**

Prerequisites: ART 222

Corequisites: None

This course provides a continuation of the skills and techniques used in ART 222. Emphasis is placed on woodcarving and other processes. Upon completion, students should be able to use original designs in the creation of functional and sculptural forms. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 231 Printmaking I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces printmaking: its history, development techniques, and processes. Emphasis is placed on basic applications with investigation into image source and development. Upon completion, students should be able to produce printed images utilizing a variety of methods. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 232 Printmaking II (0-6-0-3)**

Prerequisites: ART 231

Corequisites: None

This course includes additional methods and printmaking processes. Emphasis is placed on the printed image as related to method, source, and concept. Upon completion, students should be able to produce expressive images utilizing both traditional and innovative methods. This course has been approved for transfer through the Comprehensive Articulation Agreement.



**ART 240 Painting I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the language of painting and the use of various painting materials. Emphasis is placed on the understanding and use of various painting techniques, media, and color principles. Upon completion, students should be able to demonstrate competence in the use of creative processes directed toward the development of expressive form. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 241 Painting II (0-6-0-3)**

Prerequisites: ART 240

Corequisites: None

This course provides a continuing investigation of the materials, processes, and techniques of painting. Emphasis is placed on the exploration of expressive content using a variety of creative processes. Upon completion, students should be able to demonstrate competence in the expanded use of form and variety. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 244 Watercolor (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces basic methods and techniques used in watercolor. Emphasis is placed on application, materials, content, and individual expression. Upon completion, students should be able to demonstrate a variety of traditional and non-traditional concepts used in watercolor media. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 247 Jewelry I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces a basic understanding of the design and production of jewelry. Emphasis is placed on concepts and techniques using metals and other materials. Upon completion, students should be able to demonstrate an ability to use appropriate methods to create unique jewelry. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 248 Jewelry II (0-6-0-3)**

Prerequisites: ART 247

Corequisites: None

This course is a continuation of the skills learned in ART 247. Emphasis is placed on the creation of individual designs that utilize a variety of techniques such as casting, cloisonne, and plique-a-jour. Upon completion, students should be able to create jewelry which demonstrates originality. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 250 Surface Design: Textiles (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the basic principles and elements of art as applied to textile surfaces. Emphasis is placed on direct, top-dyed processes

that utilize both synthetic and natural dyes, and techniques such as batik, stenciling, and stamping. Upon completion, students should be able to demonstrate a basic understanding of appropriate materials and techniques as they apply to original design on a variety of textile surfaces. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

**ART 260 Photography Appreciation (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the origins and historical development of photography. Emphasis is placed on the study of composition and history of photography as an art form. Upon completion, students should be able to recognize and produce, using color transparencies, properly exposed, well-composed photographs. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

**ART 261 Photography I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces photographic equipment, theory, and processes. Emphasis is placed on camera operation, composition, darkroom technique, and creative expression. Upon completion, students should be able to successfully expose, develop, and print a well-conceived composition. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 262 Photography II (0-6-0-3)**

Prerequisites: ART 261

Corequisites: None

This course introduces the creative manipulation of alternative photographic materials and processes such as toning, hand coloring, infrared, and multiple exposure. Emphasis is placed on personal vision and modes of seeing. Upon completion, students should be able to create properly exposed images using a variety of photographic materials and processes. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 275 Intro to Commercial Art (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the materials and techniques used in creative layout design for publication. Emphasis is placed on design for advertising in a variety of techniques and media including computer graphics. Upon completion, students should be able to demonstrate competence in manual camera ready layout design and computer graphics literacy. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ART 281 Sculpture I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course provides an exploration of the creative and technical methods of sculpture with focus on the traditional processes. Emphasis is placed on



developing basic skills as they pertain to three dimensional expression in various media. Upon completion, students should be able to show competence in variety of sculptural approaches. This course has been approved for transfer through the Comprehensive Articulation Agreement.

#### **ART 282 Sculpture II (0-6-0-3)**

Prerequisites: ART 281

Corequisites: None

This course builds on the visual and technical skills learned in ART 281. Emphasis is placed on developing original solutions to sculptural problems in a variety of media. Upon completion, students should be able to express individual ideas using the techniques and materials of sculpture. This course has been approved for transfer through the Comprehensive Articulation Agreement.

#### **ART 283 Ceramics I (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course provides an introduction to three dimensional design principles using the medium of clay. Emphasis is placed on fundamentals of forming, surface design, glaze application, and firing. Upon completion, students should be able to demonstrate skills in slab and coil construction, simple wheel forms, glaze technique, and creative expression. This course has been approved for transfer through the Comprehensive Articulation Agreement.

#### **ART 284 Ceramics II (0-6-0-3)**

Prerequisites: ART 283

Corequisites: None

This course covers advanced hand building and wheel techniques. Emphasis is placed on creative expression, surface design, sculptural quality, and glaze effect. Upon completion, students should be able to demonstrate a high level of technical competence in forming and glazing with a development of three-dimensional awareness. This course has been approved for transfer through the Comprehensive Articulation Agreement.

#### **ART 285 Ceramics III (0-6-0-3)**

Prerequisites: ART 284

Corequisites: None

This course provides the opportunity for advanced self-determined work in sculptural and functional ceramics. Emphasis is placed on developing the technical awareness of clay bodies, slips, engobes, and firing procedures necessary to fulfill student's artistic goals. Upon completion, students should be able to demonstrate a knowledge of materials and techniques necessary to successfully create original projects in the clay medium. This course has been approved for transfer through the Comprehensive Articulation Agreement.

#### **ART 286 Ceramics IV (0-6-0-3)**

Prerequisites: ART 285

Corequisites: None

This course provides the opportunity for self determined work in sculptural and functional ceramics. Emphasis is placed on developing the technical awareness of glaze materials, glaze formulation, and firing techniques necessary to fulfill the stu-

dent's artistic goals. Upon completion, students should be able to demonstrate knowledge of materials and techniques necessary to successfully create original projects in the clay medium. This course has been approved for transfer through the Comprehensive Articulation Agreement.

#### **ART 288 Studio (0-6-0-3)**

Prerequisites: None

Corequisites: None

This course provides the opportunity for advanced self-determined work beyond the limits of regular studio course sequences. Emphasis is placed on creative self-expression and in-depth exploration of techniques and materials. Upon completion, students should be able to create original projects specific to media, materials, and techniques. This course has been approved for transfer through the Comprehensive Articulation Agreement.

### **Automation Training**

#### **ATR 112 Intro to Automation (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the basic principles of automated manufacturing and describes the tasks that technicians perform on the job. Topics include the history, development, and current applications of robots and automated systems including their configuration, operation, components, and controls. Upon completion, students should be able to understand the basic concepts of automation and robotic systems. Additional topics include automated assembly systems and production economics.

#### **ATR 211 Robot Programming (2-3-0-3)**

Prerequisites: ATR 112 and CSC 129

Corequisites: None

This course provides the operational characteristics of industrial robots and programming in their respective languages. Topics include robot programming utilizing teach pendants, PLCs, and personal computers; and the interaction of external sensors, machine vision, network systems, and other related devices. Upon completion, students should be able to program and demonstrate the operation of various robots. Additional topics include artificial intelligence simulation and offline programming.

### **Automotive Technology**

#### **AUT 110 Intro to Auto Technology (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course covers the basic concepts and terms of automotive technology, workplace safety, North Carolina state inspection, safety and environmental regulations, and use of service information resources. Topics include familiarization with components along with identification and proper use of various automotive hand and power tools. Upon completion, students should be able to describe terms associated with automobiles, identify and use basic tools and shop equipment, and conduct North Carolina safety/emissions inspections.



**AUT 113 Automotive Servicing (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course covers diagnostic procedures necessary to determine the nature and cause of auto service problems and the procedures used to repair/replace components. Emphasis is placed on troubleshooting, testing, adjusting, repairing, and replacing components using appropriate test equipment and service information. Upon completion, students should be able to perform a variety of automotive repairs using proper service procedures and operate appropriate equipment.

**AUT 115 Engine Fundamentals (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis/repair of automotive engines using appropriate tools, equipment, procedures, and service information.

**AUT 116 Engine Repair (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course covers service/repair/rebuilding of block, head, and internal engine components. Topics include engine repair/reconditioning using service specifications. Upon completion, students should be able to rebuild/recondition an automobile engine to service specifications.

**AUT 141 Suspension & Steering System (2-4-0-4)**

Prerequisites: None

Corequisites: None

This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair various steering and suspension components, check and adjust various alignment angles, and balance wheels.

**AUT 151 Brake Systems (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

**AUT 152 Brake Systems Lab (0-2-0-1)**

Prerequisites: None

Corequisites: AUT 151

This course provides a laboratory setting to enhance brake system skills. Emphasis is placed on

practical experiences that enhance the topics presented in AUT 151. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 151.

**AUT 161 Electrical Systems (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course covers basic electrical theory and wiring diagrams, test equipment, and diagnosis/repair/replacement of batteries, starters, alternators, and basic electrical accessories. Topics include diagnosis and repair of battery, starting, charging, lighting, and basic accessory systems problems. Upon completion, students should be able to diagnose, test, and repair the basic electrical components of an automobile.

**AUT 164 Automotive Electronics (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course covers fundamentals of electrical/electronic circuitry, semi-conductors, and microprocessors. Topics include Ohm's law, circuits, AC/DC current, solid state components, digital applications, and the use of digital multimeters. Upon completion, students should be able to apply Ohm's law to diagnose and repair electrical/electronic circuits using digital multimeters and appropriate service information.

**AUT 171 Heating & Air Conditioning (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis/repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.

**AUT 181 Engine Performance Electrical (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers the principles, systems, and procedures required for diagnosing and restoring engine performance using electrical/electronics test equipment. Topics include procedures for diagnosis and repair of ignition, emission control, and related electronic systems. Upon completion, students should be able to describe operation of and diagnose/repair ignition/emission control systems using appropriate test equipment and service information.

**AUT 182 Engine Perfor-Elec Lab (0-3-0-1)**

Prerequisites: None

Corequisites: AUT 181

This course provides a laboratory setting to enhance the skills for diagnosing and restoring engine performance using electrical/electronics test equipment. Emphasis is placed on practical experiences that enhance the topics presented in AUT 181. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 181.



**AUT 183 Engine Performance-Fuels (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers the principles of fuel delivery/management, exhaust/emission systems, and procedures for diagnosing and restoring engine performance using appropriate test equipment. Topics include procedures for diagnosis/repair of fuel delivery/management and exhaust/emission systems using appropriate service information. Upon completion, students should be able to describe, diagnose, and repair engine fuel delivery/management and emission control systems using appropriate service information and diagnostic equipment.

**AUT 184 Engine Perfor-Fuels Lab (0-3-0-1)**

Prerequisites: None

Corequisites: AUT 183

This course provides a laboratory setting to enhance the skills for diagnosing and repairing fuel delivery/management and emission systems. Emphasis is placed on practical experiences that enhance the topics presented in AUT 183. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 183.

**AUT 185 Emission Controls (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers the design and function of emission control devices. Topics include chemistry of combustion as well as design characteristics and emission control devices which limit tailpipe, crankcase, and evaporative emissions. Upon completion, students should be able to troubleshoot, test, and service emission control systems.

**AUT 186 Automotive Computer Appl (I-2-0-2)**

Prerequisites: None

Corequisites: None

This course introduces computer operating systems, word processing, and electronic automotive service information systems. Emphasis is placed on operation systems, word processing, and electronic automotive service information systems. Upon completion, students should be able to use an operating system to access information pertaining to automotive technology and perform word processing.

**AUT 221 Automatic Transmissions (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course covers operation, diagnosis, service, and repair of automatic transmissions/transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair automatic drive trains.

**AUT 231 Manual Drive Trains/Axles (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers the operation, diagnosis, and repair of manual transmissions/transaxles, clutches,

drive shafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair manual drive trains.

**AUT 232 Manual Drive Trains/Axles Lab (0-3-0-1)**

Prerequisites: None

Corequisites: AUT 231

This course provides a laboratory setting to enhance the skills for diagnosing and repairing manual transmissions/transaxles, clutches, drive shafts, axles, and final drives. Emphasis is placed on practical experiences that enhance the topics presented in AUT 231. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in AUT 231.

**Banking and Finance****BAF 143 Financial Planning (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the perspectives, principles, and practices of financial planning. Topics include investment, retirement, tax, and estate planning. Upon completion, students should be able to understand the process that looks at a customer's financial picture and recommend strategies to achieve the customer's objectives.

**BAF 246 International Banking (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers international agencies, foreign exchange activities, Edge Act corporations, international lending, and risk assessment. Topics include corresponding bank relationships, foreign exchange the Eurodollar market, and developing international business. Upon completion, students should be able to identify various international services banks provide and explain international lending concepts, credit principles, and risk factors.

**Biology****BIO 110 Principles of Biology (3-3-0-4)**

Prerequisites: RED 090

Corequisites: None

This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, taxonomy, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**BI0 111 General Biology I (3-3-0-4)**

Prerequisites: RED 090

Corequisites: None

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological



chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**BIO 112 General Biology II (3-3-0-4)**

Prerequisites: BIO 111

Corequisites: None

This course is a continuation of BIO 111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**BIO 120 Introductory Botany (3-3-0-4)**

Prerequisites: BIO 110 or BIO 111

Corequisites: None

This course provides an introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa. Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non-seed plants. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**BIO 130 Introductory Zoology (3-3-0-4)**

Prerequisites: BIO 110 or BIO 111

Corequisites: None

This course provides an introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is placed on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**BIO 140 Environmental Biology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues. This course has been approved to satisfy the

Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**BIO 140A Environmental Biology Lab (0-3-0-1)**

Prerequisites: None

Corequisites: BIO 140

This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**BIO 146 Regional Natural History (3-3-0-4)**

Prerequisites: None

Corequisites: RED 090

This course is an interdisciplinary and historical analysis of the natural resources of the region. Emphasis is placed on geology, climate, forest systems, watersheds, water resources, and fish and wildlife resources of the region. Upon completion, students should be able to demonstrate comprehension of the natural history and the integration of the natural resources of the region. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BIO 150 Genetics in Human Affairs (3-0-0-3)**

Prerequisites: BIO 110 or BIO 111

Corequisites: None

This course describes the importance of genetics in everyday life. Topics include the role of genetics in human development, birth defects, cancer and chemical exposure, and current issues including genetic engineering and fertilization methods. Upon completion, students should be able to understand the relationship of genetics to society, today and its possible influence on our future. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BIO 155 Nutrition (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers the biochemistry of foods and nutrients with consideration of the physiological effects of specialized diets for specific biological needs. Topics include cultural, religious, and economic factors that influence a person's acceptance of food as well as nutrient requirements of the various life stages. Upon completion, students should be able to identify the functions and sources of nutrients, the mechanisms of digestion, and the nutritional requirements of all age groups. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BIO 163 Basic Anat & Physiology (4-2-0-5)**

Prerequisites: RED 090

Corequisites: None

This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an intro-



duction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BIO 165 Anatomy and Physiology I (3-3-0-4)**

Prerequisites: RED 090

Corequisites: None

This course is the first of a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BIO 166 Anatomy and Physiology II (3-3-0-4)**

Prerequisites: BIO 165

Corequisites: None

This course is the second in a two-course sequence which provides a comprehensive study of the anatomy and physiology of the human body. Topics include the structure, function, and interrelationship of organ systems with emphasis on the processes which maintain homeostasis. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and the interrelationships of all body systems. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BIO 168 Anatomy and Physiology I (3-3-0-4)**

Prerequisites: RED 090

Corequisites: None

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, nervous, special senses, and endocrine systems. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BIO 169 Anatomy and Physiology II (3-3-0-4)**

Prerequisites: BIO 168

Corequisites: None

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BIO 175 General Microbiology (2-2-0-3)**

Prerequisites: BIO I 10 or BIO I I I or BIO 163 or BIO 166 or BIO 169

Corequisites: None

This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BIO 198 Seminar in Biology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

**BIO 271 Pathophysiology (3-0-0-3)**

Prerequisites: BIO 163 or BIO 166 or BIO 169

Corequisites: None

This course provides an in-depth study of human pathological processes and their effects on homeostasis. Emphasis is placed on interrelationships among organ systems in deviations from homeostasis. Upon completion, students should be able to demonstrate a detailed knowledge of pathophysiology. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BIO 275 Microbiology (3-3-0-4)**

Prerequisites: BIO 110 or BIO I 11 or BIO 163 or BIO 165 or BIO 168

Corequisites: None

This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BIO 291 Selected Topics in Biology (1-3-0-1)**

Prerequisites: Enrollment in Program

Corequisites: None

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.



**BIO 292 Selected Topics in Biology (2-6-0-2)**

Prerequisites: Enrollment in the Program

Corequisites: None

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

**BIO 293 Selected Topics in Biology (3-6-0-3)**

Prerequisites: Enrollment in the Program

Corequisites: None

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

**Blueprint Reading****BPR 111 Blueprint Reading (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the basic principles of blueprint reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic blueprints and visualize the features of a part.

**BPR 121 Blueprint Reading: Mech (1-2-0-2)**

Prerequisites: BPR 111, MAC 131

Corequisites: None

This course covers the interpretation of intermediate blueprints. Topics include tolerancing, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret a mechanical working drawing.

**BPR 130 Blueprint Reading/Const (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers the interpretation of blueprints and specifications that are associated with the construction trades. Emphasis is placed on interpretation of details for foundations, floor plans, elevations, and schedules. Upon completion, students should be able to read and interpret a set of construction blueprints.

**Botany - See Biology****Business****BUS 110 Introduction to Business (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BUS 115 Business Law I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the ethics and legal framework of business. Emphasis is placed on contracts, negotiable instruments, Uniform Commercial Code, and the working of the court systems. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BUS 116 Business Law II (3-0-0-3)**

Prerequisites: BUS 115

Corequisites: None

This course continues the study of ethics and business law. Emphasis is placed on bailments, sales, risk-bearing, forms of business ownership, and copyrights. Upon completion, students should be able to apply ethical issues and laws covered to selected business decision-making situations.

**BUS 121 Business Math (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course covers fundamental mathematical operations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Upon completion, students should be able to apply mathematical concepts to business.

**BUS 125 Personal Finance (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides a study of individual and family financial decisions. Emphasis is placed on building useful skills in buying, managing finances, increasing resources, and coping with current economic conditions. Upon completion, students should be able to develop a personal financial plan.

**BUS 137 Principles of Management (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management.

**BUS 210 Investment Analysis (3-0-0-3)**

Prerequisites: ACC 111 or ACC 120

Corequisites: None

This course examines the concepts related to financial investment and the fundamentals of managing investments. Emphasis is placed on the securities markets, stocks, bond, and mutual funds, as well as tax implications of investment alternatives. Upon completion, students should be able to analyze and interpret investment alternatives and report findings to users of financial information.



**BUS 217 Employment Law and Regs (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the principle laws and regulations affecting public and private organizations and their employees or prospective employees. Topics include fair employment practices, EEO, affirmative action, and employee rights and protections. Upon completion, students should be able to evaluate organization policy for compliance and assure that decisions are not contrary to law.

**BUS 220 Purchasing (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the purchasing function and explains its role in business. Topics include the legal and ethical aspects of purchasing, quality assurance, and the application of purchasing formulas and methods for cost analysis. Upon completion, students should be able to complete a purchase transaction incorporating legal, ethical, quality, and cost consideration.

**BUS 225 Business Finance (2-2-0-3)**

Prerequisites: ACC 120

Corequisites: None

This course provides an overview of business financial management. Emphasis is placed on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management.

**BUS 228 Business Statistics (2-2-0-3)**

Prerequisites: MAT 115, MAT 140, or MAT 161

Corequisites: None

This course introduces the use of statistical methods and tools in evaluating research data for business applications. Emphasis is placed on basic probability, measures of spread and dispersion, central tendency, sampling, regression analysis, and inductive inference. Upon completion, students should be able to apply statistical problem solving to business. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**BUS 230 Small Business Management (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the challenges of entrepreneurship including the startup and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan.

**BUS 231 Computerized Inventory (2-2-0-3)**

Prerequisites: ACC 120 and CIS 110 or CIS 111

Corequisites: None

This course provides an overview of inventory procedures as related to management decisions. Emphasis is placed on general terms, methods, techniques, and computer applications. Upon completion, students should be able to apply inventory principles and processes in the workplace.

**BUS 234 Training and Development (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers developing, conducting, and evaluating employee training with attention to adult learning principles. Emphasis is placed on conducting a needs assessment, using various instructional approaches, designing the learning environment, and locating learning resources. Upon completion, students should be able to design, conduct, and evaluate a training program.

**BUS 235 Performance Management (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course includes the legal background for performance management and the basic methodology used in developing and validating a performance management system. Emphasis is placed on job analysis, job description, appraisal instruments, and action plans. Upon completion students should be able to develop, implement, and maintain a comprehensive performance management system.

**BUS 239 Bus Applications Seminar (1-2-0-2)**

Prerequisites: ACC 120, BUS 115, BUS 137, MKT 120 and ECO 151 or ECO 251 or ECO 252

Corequisites: None

This course is designed as a capstone course for Business Administration majors. Emphasis is placed on decision making in the areas of management, marketing, production, purchasing, and finance. Upon completion, students should be able to apply the techniques, processes, and vital professional skills needed in the work place.

**BUS 255 Org Behavior in Business (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the impact of different management practices and leadership styles on worker satisfaction and morale, organizational effectiveness, productivity, and profitability. Topics include a discussion of formal and informal organizations, group dynamics, motivation, and managing conflict and change. Upon completion, students should be able to analyze different types of interpersonal situations and determine an appropriate course of action.

**BUS 256 Recruit Select & Per Plan (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the basic principles involved in managing the employment process. Topics include personnel planning, recruiting, interviewing and screening techniques, maintaining employee records; and voluntary and involuntary separations. Upon completion, students should be able to acquire and retain employees who match position requirements and fulfill organizational objectives. This course is a unique concentration requirement of the Human Resources Management concentration in the Business Administration program.



**BUS 258 Compensation and Benefits (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course is designed to study the basic concepts of pay and its role in rewarding performance. Topics include wage and salary surveys, job analysis, job evaluation techniques, benefits, and pay-for-performance programs. Upon completion, students should be able to develop and manage a basic compensation system to attract, motivate, and retain employees. This course is a unique concentration requirement of the Human Resources Management concentration in the Business Administration program.

**BUS 259 HRM Applications (3-0-0-3)**

Prerequisites: BUS 217, BUS 234, BUS 256, and BUS 258

Corequisites: None

This course provides students in the Human Resources Management concentration the opportunity to reinforce their learning experiences from preceding HRM courses. Emphasis is placed on application of day-to-day HRM functions by completing in-basket exercises and through simulations. Upon completion, students should be able to determine the appropriate actions called for by typical events that affect the status of people at work. This course is a unique concentration requirement of the Human Resources Management concentration in the Business Administration program.

**BUS 260 Business Communication (3-0-0-3)**

Prerequisites: ENG 111, OST 164

Corequisites: None

This course is designed to develop skills in writing business communications. Emphasis is placed on business reports, correspondence, and professional presentations. Upon completion, students should be able to communicate effectively in the work place.

**Ceramics - See Art****Chemistry****CHM 121 Foundations of Chemistry (3-0-0-3)**

Prerequisites: MAT 161 or MAT 080, RED 090

Corequisites: CHM 121A

This course is designed for those who have no previous high school chemistry or a grade of C or less in high school chemistry. Topics include matter, structure of the atom, nomenclature, chemical equations, bonding and reactions; mathematical topics include measurements, scientific notation, and stoichiometry. Upon completion, students should be able to demonstrate an understanding of chemical concepts and an ability to solve related problems in subsequent chemistry courses.

**CHM 121A Foundations of Chem Lab (0-2-0-1)**

Prerequisites: None

Corequisites: CHM 121

This course is a laboratory for CHM 121. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 121. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 121.

**CHM 130 Gen, Org, & Biochemistry (3-0-0-3)**

Prerequisites: MAT 070, RED 090

Corequisites: CHM 130A

This course provides a survey of basic facts and principles of general, organic, and biochemistry. Topics include measurement, molecular structure, nuclear chemistry, solutions, acid-base chemistry, gas laws, and the structure, properties, and reactions of major organic and biological groups. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**CHM 130A Gen, Org, & Biochem Lab (0-2-0-1)**

Prerequisites: None

Corequisites: CHM 130

This course is a laboratory for CHM 130. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 130. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 130. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**CHM 151 General Chemistry 1 (3-3-0-4)**

Prerequisites: MAT 161 or MAT 171 and CHM 121 or departmental permission

Corequisites: None

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**CHM 152 General Chemistry II (3-3-0-4)**

Prerequisites: CHM 151

Corequisites: None

This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**CHM 198 Seminar in Chemistry (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the pres-



entation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

### **CHM 251 Organic Chemistry I (3-3-0-4)**

Prerequisites: CHM 152

Corequisites: None

This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers; further topics include isomerization, stereochemistry, and spectroscopy. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of covered organic topics as needed in CHM 252. This course has been approved for transfer through the Comprehensive Articulation Agreement.

### **CHM 252 Organic Chemistry II (3-3-0-4)**

Prerequisites: CHM 251

Corequisites: None

This course provides continuation of the systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of aromatics, aldehydes, ketones, carboxylic acids and derivatives, amines and heterocyclics; multi-step synthesis will be emphasized. Upon completion, students should be able to demonstrate an understanding of organic concepts as needed to pursue further study in chemistry and related professional fields. This course has been approved for transfer through the Comprehensive Articulation Agreement.

### **CHM 261 Quantitative Analysis (2-6-0-4)**

Prerequisites: CHM 152

Corequisites: None

This course introduces classical methods of chemical analysis with an emphasis on laboratory techniques. Topics include statistical data treatment; stoichiometric and equilibrium calculations; and titrimetric, gravimetric, acid-base, oxidation-reduction, and compleximetric methods. Upon completion, students should be able to perform classical quantitative analytical procedures. This course has been approved for transfer through the Comprehensive Articulation Agreement.

## **Computer Technology**

### **CIS 110 Introduction to Computers (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course provides an introduction to computers and computing. Topics include the impact of computers on society, ethical issues, and hardware/software applications, including spreadsheets, databases, word processors, graphics, the Internet, and operating systems. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

### **CIS 111 Basic PC Literacy (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course provides a brief overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and workplace use. Upon completion, students should be able to demonstrate basic personal computer skills.

### **CIS 115 Intro to Prog & Logic (2-2-0-3)**

Prerequisites: MAT 070

Corequisites: None

This course introduces computer programming and problem solving in a programming environment, including an introduction to operating systems, text editor, and a language translator. Topics include language syntax, data types, program organization, problem-solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

### **CIS 118 IS Professional Comm (2-0-0-2)**

Prerequisites: CIS 120, CIS 152, CIS 162,  
OST 136

Corequisites: None

This course prepares the information systems professional to communicate with corporate personnel from management to end-users. Topics include information systems cost justification tools, awareness of personal hierarchy of needs, addressing these needs, and discussing technical issues with non-technical personnel. Upon completion, students should be able to communicate information systems issues to technical and non-technical personnel.

### **CIS 120 Spreadsheet I (2-2-0-3)**

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts.

### **CIS 121 User Support & Softw Eval (1-4-0-3)**

Prerequisites: CIS 120, CIS 152, CIS 162,  
CIS 215, OST 136

Corequisites: None

This course provides an opportunity to evaluate software and hardware and make recommendations to meet end-user needs. Emphasis is placed on software and hardware evaluation, installation, training, and support. Upon completion, students should be able to present proposals and make hardware and software recommendations based on their evaluations.



**CIS 130 Survey of Operating Sys (2-3-0-3)**

Prerequisites: None

Corequisites: None

The course covers operating system concepts which are necessary for maintaining and using computer systems. Topics include disk, file, and directory structures; installation and setup; resource allocation, optimization, and configuration; system security; and other related topics. Upon completion, students should be able to install and configure operating systems and optimize performance.

**CIS 147 Operating System -Windows (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces operating systems concepts for a Windows operating system. Topics include hardware management, file and memory management, system configuration/ optimization, and utilities. Upon completion, students should be able to perform operating system functions at the support level in a Windows environment.

**CIS 148 Operating System -Windows NT (2-2-0-3)**

Prerequisites: None

Corequisites: CIS 130

This course introduces operating systems concepts for the Windows NT operating system. Topics include hardware management, file and memory management, system configuration/optimization, networking options, and utilities. Upon completion, students should be able to perform operating system functions at the single/multi-user support level in a Windows NT environment.

**CIS 152 Database Concepts & Apps (2-2-0-3)**

Prerequisites: CIS 110 or CIS 111 or CIS 115

Corequisites: None

This course introduces database design and creation using a DBMS product. Topics include database terminology, usage in industry, design theory, types of DBMS models, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to create simple database tables, queries, reports, and forms which follow acceptable design practices.

**CIS 153 Database Applications (2-2-0-3)**

Prerequisites: CIS 152

Corequisites: None

This course covers advanced database functions continued from CIS 152. Topics include manipulating multiple tables, advanced queries, screens and reports, linking, and command files. Upon completion, students should be able to create multiple table systems that demonstrate updates, screens, and reports representative of industry requirements.

**CIS 162 MM Presentation Software (2-2-0-3)**

Prerequisites: (CIS 110 or CIS 111)

Corequisites: None

This course is designed to integrate visual and audio resources using presentation software in a simple interactive multimedia project. Emphasis is placed upon design and audience considerations, general prototyping, and handling of media resources. Upon completion, students should be

able to demonstrate an original interactive multimedia presentation implementing all of these resources in a professional manner.

**CIS 163 Prog Interfaces Internet (2-2-0-3)**

Prerequisites: (CIS 110 or CIS 111), CIS 115, CIS 172

Corequisites: None

This course creates interactive multimedia applications and applets for the Internet using webspecific languages. Emphasis is placed on audio, video, graphic, and network resources and various file formats. Upon completion, students should be able to create an interactive multimedia application or applet for the Internet.

**CIS 172 Intro to the Internet (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the various navigational tools and services of the Internet. Topics include using Internet protocols, search engines, file compression/decompression, FTP, e-mail, listservers, and other related topics. Upon completion, students should be able to use Internet resources, retrieve/decompress files, and use e-mail, FTP, and other Internet tools.

**CIS 211 AS/400 Maint & Operations (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course is designed to cover the fundamental AS/400 System operations, screens, utilities, and terminology. Topics include an introduction to the AS/400 operating system, security, backup and restore, handling spooled files, and using commands and menus to create and manipulate objects. Upon completion, students should be able to use utilities, create libraries, save and restore files, monitor and control jobs and queues, and know AS/400 operations.

**CIS 215 Hardware Install/Maint (2-3-0-3)**

Prerequisites: (CIS 110 or CIS 111), CIS 115, CIS 130

Corequisites: None

This course covers the basic hardware of a personal computer, including operations and interactions with software. Topics include component identification, the memory system, peripheral installation and configuration, preventive maintenance, and diagnostics and repair. Upon completion, students should be able to select appropriate computer equipment, upgrade and maintain existing equipment, and troubleshoot and repair non-functioning personal computers.

**CIS 220 Spreadsheet II (1-2-0-2)**

Prerequisites: CIS 120

Corequisites: None

This course covers advanced spreadsheet design and development. Topics include advanced functions, charting, macros, databases, and linking. Upon completion, students should be able to demonstrate competence in designing complex spreadsheets.



**CIS 225 Integrated Software (1-2-0-2)**

Prerequisites: CIS 120, CIS 152, CIS 162,  
OST 136

Corequisites: None

This course provides strategies to perform data transfer among software programs. Emphasis is placed on data interchange among word processors, spreadsheets, presentation graphics, databases, and communications products. Upon completion, students should be able to integrate data to produce documents using multiple technologies.

**CIS 246 Operating System - UNIX (2-3-0-3)**

Prerequisites: CIS 130

Corequisites: None

This course includes operating systems concepts for UNIX operating systems. Topics include hardware management, file and memory management, system configuration/optimization, utilities, and other related topics. Upon completion, students should be able to effectively use the UNIX operating system and its utilities.

**CIS 286 Systems Analysis & Design (3-0-0-3)**

Prerequisites: CIS 115, CSC 235, CSC 138

Corequisites: None

This course examines established and evolving methodologies for the analysis, design, and development of a business information system. Emphasis is placed on business systems characteristics, managing information systems projects, prototyping, CASE tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

**CIS 288 Systems Project (1-4-0-3)**

Prerequisites: (CIS 286 or CIS 227), CSC 235,  
CSC 238, CSC 134, CSC 139

Corequisites: None

This course provides an opportunity to complete a significant systems project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete a project from the definition phase through implementation.

**Civil Engineering Technology****CIV 110 Statics/Strength of Materials (2-6-0-4)**

Prerequisites: PHY 131 and MAT 121

Corequisites: MAT 122

This course includes vector analysis, equilibrium of force systems, friction, sectional properties, stress/strain, and deformation. Topics include resultants and components of forces, moments and couples, free-body diagrams, shear and moment diagrams, trusses, frames, beams, columns, connections, and combined stresses. Upon completion, students should be able to analyze simple structures.

**CIV 111 Soils and Foundations (2-3-0-3)**

Prerequisites: CIV 110 or MEC 250

Corequisites: None

This course presents an overview of soil as a construction material using both analysis and testing

procedures. Topics include index properties, classification, stress analysis, compressibility, compaction, dewatering, excavation, stabilization, settlement, and foundations. Upon completion, students should be able to perform basic soil tests and analyze engineering properties of soil. Oral and written communications skills will be emphasized.

**CIV 125 Civil/Surveying CAD (1-6-0-3)**

Prerequisites: CIS 111 or CSC 129

and EGR 115 and SRV 110

Corequisites: None

This course introduces civil/surveying computer-aided drafting (CAD) software. Topics include drawing, editing, and dimensioning commands; plotting; and other related civil/surveying topics. Upon completion, students should be able to produce civil/surveying drawings using CAD software.

**CIV 210 Engineering Materials (1-3-0-2)**

Prerequisites: CIV 110

Corequisites: None

This course covers the behavior and properties of Portland cement and asphaltic concretes and laboratory and field testing. Topics include cementing agents and aggregates; water and admixtures; proportioning, production, placing, consolidation, and curing; and inspection methods. Upon completion, students should be able to proportion concrete mixes to attain predetermined strengths and other properties and perform standard control tests. Oral and written communications skills will be emphasized.

**CIV 211 Hydraulics and Hydrology (2-3-0-3)**

Prerequisites: CIV 110 or MEC 250

Corequisites: None

This course introduces the basic engineering principles and characteristics of hydraulics and hydrology. Topics include precipitation and runoff, fluid statics and dynamics, flow measurement, and pipe and open channel flow. Upon completion, students should be able to analyze and size drainage structures.

**CIV 212 Environmental Planning (2-3-0-3)**

Prerequisites: CIV 211

Corequisites: None

This course covers water and wastewater technology, erosion and sedimentation control, and other related topics. Topics include collection, treatment, and distribution of water and wastewater and erosion and sedimentation control law. Upon completion, students should be able to demonstrate knowledge of water and wastewater systems and prepare erosion and sedimentation control plans.

**CIV 215 Highway Technology (1-3-0-2)**

Prerequisites: CIV 110 and SRV 111

Corequisites: CIV 211

This course introduces the essential elements of roadway components and design. Topics include subgrade and pavement construction, roadway drawings and details, drainage, superelevation, and North Carolina Department of Transportation Standards. Upon completion, students should be able to use roadway drawings and specifications to develop superelevation, drainage, and general highway construction details.



**CIV 220 Basic Structural Concepts (1-3-0-2)**

Prerequisites: CIV 110 or MEC 250

Corequisites: None

This course covers the historical perspective of structures as well as types, materials, common elements, and mechanical principles of structures. Topics include basic structure shapes, advantages and disadvantages of standard building materials, application of structural concepts, and other related topics. Upon completion, students should be able to demonstrate an understanding of basic structural concepts.

**CIV 221 Steel and Timber Design (2-3-0-3)**

Prerequisites: CIV 110 or MEC 250

Corequisites: None

This course introduces the basic elements of steel and timber structures. Topics include the analysis and design of steel and timber beams, columns, and connections and the use of appropriate manuals and codes. Upon completion, students should be able to analyze, design, and draw simple steel and timber structures.

**CIV 222 Reinforced Concrete (2-3-0-3)**

Prerequisites: CIV 110 or MEC 250

Corequisites: None

This course introduces the basic elements of reinforced concrete and masonry structures. Topics include analysis and design of reinforced concrete beams, slabs, columns, footings, and retaining walls; load-bearing masonry walls; and ACI manuals and codes. Upon completion, students should be able to analyze and design components of a structure using reinforced concrete and masonry elements and utilize appropriate ACI publications.

**CIV 230 Construction Estimating (2-3-0-3)**

Prerequisites: CIS 111, EGR 115,  
CIS 110 or ARC 111

Corequisites: None

This course covers quantity take-offs of labor, materials, and equipment and calculation of direct and overhead costs for a construction project. Topics include the interpretation of working drawings and specifications, types of contracts and estimates, building codes, bidding techniques and procedures, and estimating software. Upon completion, students should be able to prepare a detailed cost estimate and bid documents for a construction project.

**CIV 240 Project Management (2-3-0-3)**

Prerequisites: CIS 111 and EGR 115

Corequisites: None

This course introduces construction planning and scheduling techniques and project management software. Topics include construction safety, operation analysis, construction scheduling, construction control systems, claims and dispute resolutions, project records, and documentation. Upon completion, students should be able to demonstrate an understanding of the roles of construction project participants, maintain construction records, and prepare construction schedules.

**CIV 250 Civil Eng Tech Project (1-3-0-2)**

Prerequisites: SRV 111, CIV 230 and CIV 211

Corequisites: None

This course includes an integrated team approach to civil engineering technology projects. Emphasis is placed on project proposal, site selection, analysis/design of structures, construction material selection, time and cost estimating, planning, and management of a project. Upon completion, students should be able to apply team concepts prepare estimates, submit bid proposals, Q manage projects. Oral and written communications skills will be emphasized.

**Criminal Justice****CJC 100 Basic Law Enforcement Training (9-27-0-18)**

Prerequisites: None

Corequisites: None

This Course covers the skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Emphasis is placed on topics and areas as defined by the North Carolina Administrative Code. Upon completion, students should be able to demonstrate competence in the topics and areas required for the state comprehensive examination.

**CJC 111 Intro to Criminal Justice (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**CJC 112 Criminology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

**CJC 113 Juvenile Justice (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers the juvenile justice system and related juvenile issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, special areas and laws unique to juveniles, and other related topics. Upon completion, students should be able to identify/discuss juvenile court structure/procedures, function and jurisdiction of juvenile agencies, processing/detention of juveniles, and case disposition.



**CJC 114 Investigative Photography (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers the operation of various photographic equipment and its application to criminal justice. Topics include using various cameras, proper exposure of film, developing film/ prints, and preparing photographic evidence. Upon completion, students should be able to demonstrate and explain the role of photography and proper film exposure and development techniques.

**CJC 120 Interviews/Interrogations (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers basic and special techniques employed in criminal justice interviews and interrogations. Emphasis is placed on the interview/interrogation process, including interpretation of verbal and physical behavior and legal perspectives. Upon completion, students should be able to conduct interviews/ interrogations in a legal, efficient, and professional manner and obtain the truth from suspects, witnesses, and victims.

**CJC 121 Law Enforcement Operations (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, students should be able to explain theories, practices, and issues related to law enforcement operations. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**CJC 122 Community Policing (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers the historical, philosophical, and practical dimensions of community policing. Emphasis is placed on the empowerment of police and the community to find solutions to problems by forming partnerships. Upon completion, students should be able to define community policing, describe how community policing strategies solve problems, and compare community policing to traditional policing.

**CJC 131 Criminal Law (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

**CJC 132 Court Procedure & Evidence (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers judicial structure/process/ procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include

consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

**CJC 141 Corrections (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**CJC 151 Intro to Loss Prevention (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the concepts and methods related to commercial and private security systems. Topics include the historical, philosophical, and legal basis of security, with emphasis on security surveys, risk analysis, and associated functions. Upon completion, students should be able to demonstrate and understand security systems, risk management, and the laws relative to loss prevention.

**CJC 198 Seminar in Criminal Justice (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

**CJC 211 Counseling (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the basic elements of counseling and specific techniques applicable to the criminal justice setting. Topics include observation, listening, recording, interviewing, and problem exploration necessary to form effective helping relationships. Upon completion, students should be able to discuss and demonstrate the basic techniques of counseling.

**CJC 212 Ethics & Comm Relations (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.



**CJC 213 Substance Abuse (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a study of substance abuse in our society. Topics include the history and classifications of drug abuse and the social, physical, and psychological impact of drug abuse. Upon completion, students should be able to identify various types of drugs, their effects on human behavior and society, and treatment modalities.

**CJC 214 Victimology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the study of victims. Emphasis is placed on roles/characteristics of victims, victim interaction with the criminal justice system and society, current victim assistance programs, and other related topics. Upon completion, students should be able to discuss and identify victims, the uniqueness of victims' roles, and current victim assistance programs.

**CJC 215 Organization & Administration (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the components and functions of organization and administration as it applies to the agencies of the criminal justice system. Topics include operations/functions of organizations; recruiting, training, and retention of personnel; funding and budgeting; communications; span of control and discretion; and other related topics. Upon completion, students should be able to identify and discuss the basic components and functions of a criminal justice organization and its administrative operations.

**CJC 221 Investigative Principles (3-2-0-4)**

Prerequisites: RED 090

Corequisites: None

This course introduces the theories and fundamentals of the investigative process. Topics include crime scene/incident processing, information gathering techniques, collection/preservation of evidence, preparation of appropriate reports, court presentations, and other related topics. Upon completion, students should be able to identify, explain, and demonstrate the techniques of the investigative process, report preparation, and courtroom presentation.

**CJC 222 Criminalistics (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers the functions of the forensic laboratory and its relationship to successful criminal investigations and prosecutions. Topics include advanced crime scene processing, investigative techniques, current forensic technologies, and other related topics. Upon completion, students should be able to identify and collect relevant evidence at simulated crime scenes and request appropriate laboratory analysis of submitted evidence.

**CJC 223 Organized Crime (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the evolution of traditional and non-traditional organized crime and its effect on society and the criminal justice system. Topics include identifying individuals and groups involved in organized crime, areas of criminal activity, legal and political responses to organized crime, and other related topics. Upon completion, students should be able to identify the groups and activities involved in organized crime and the responses of the criminal justice system.

**CJC 225 Crisis Intervention (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces critical incident intervention and management techniques as they apply to operational criminal justice practitioners. Emphasis is placed on the victim/offender situation as well as job-related high stress, dangerous, or problem solving citizen contacts. Upon completion, students should be able to provide insightful analysis of emotional, violent, drug-induced, and other critical and/or stressful incidents that require field analysis and/or resolution.

**CJC 231 Constitutional Law (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/procedures as interpreted by the courts.

**CJC 232 Civil Liability (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers liability issues for the criminal justice professional. Topics include civil rights violations, tort liability, employment issues, and other related topics. Upon completion, students should be able to explain civil trial procedures and discuss contemporary liability issues.

**CJC 233 Correctional Law (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces statutory/case law pertinent to correctional concepts, facilities, and related practices. Topics include examination of major legal issues encompassing incarceration, probation, parole, restitution, pardon, restoration of rights, and other related topics. Upon completion, students should be able to identify/discuss legal issues which directly affect correctional systems and personnel.



**CJC 241 Community-Based Corrections (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers programs for convicted offenders that are used both as alternatives to incarceration and in post-incarceration situations. Topics include offenders, diversion, house arrest, restitution, community service, probation and parole, including both public and private participation, and other related topics. Upon completion, students should be able to identify/discuss the various programs from the perspective of the criminal justice professional, the offender, and the community.

**CJC 250 Forensic Biology (1-2-0-2)**

Prerequisites: None

Corequisites: RIO 110, BIO 111

This course covers important biological principles that are applied in the crime laboratory. Topics include forensic toxicology, forensic serology, microscopy, and DNA typing analysis, with an overview of organic and inorganic analysis. Upon completion, students should be able to articulate how a crime laboratory processes physical evidence submitted by law enforcement agencies.

**CJC 251 Forensic Chemistry 1 (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course provides a study of the fundamental concepts of chemistry as it relates to forensic science. Topics include physical and chemical properties of substances, metric measurements, chemical changes, elements, compounds, gases, and atomic structure. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of forensic chemistry.

**CJC 252 Forensic Chemistry II (3-2-0-4)**

Prerequisites: CJC 251

Corequisites: None

This course provides a study of specialized areas of chemistry specifically related to forensic science. Topics include properties of light, emission and absorption spectra, spectrophotometry, gas and liquid chromatography, and related topics in organic and biochemistry. Upon completion, students should be able to demonstrate an understanding of specialized concepts in forensic chemistry.

**Cooperative Education**

**COE 110 World of Work (1-0-0-1)**

Prerequisites: None

Corequisites: Departmental Approval

This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethic, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully make the transition from school to work.

**COE 111 Co-op Work Experience I (0-0-10-1)**

Prerequisites: None

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the

student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 112 Co-op Work Experience I (0-0-20-2)**

Prerequisites: None

Corequisites: None

This course provides work experience with a college approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 113 Co-op Work Experience I (0-0-30-3)**

Prerequisites: None

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 114 Co-op Work Experience I (0-0-40-4)**

Prerequisites: None

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 115 Work Exp Seminar I (1-0-0-1)**

Prerequisites: None

Corequisites: Departmental Approval

This course description may be written by the individual colleges. This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students will be able to make better career decisions and choices. Course may be customized specific to each curriculum area.

**COE 121 Co-op Work Experience II (0-0-10-1)**

Prerequisites: Any COE I Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.



**COE 122 Co-op Work Experience II (0-0-20-2)**

Prerequisites: Any COE I Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 123 Co-op Work Experience II (0-0-30-3)**

Prerequisites: Any COE I Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 124 Co-op Work Experience II (0-0-40-4)**

Prerequisites: Any COE I Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 125 Work Exp Seminar II (1-0-0-1)**

Prerequisites: None

Corequisites: Departmental Approval

This course description may be written by the individual colleges. This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students will be able to make better career decisions and choices. Course may be customized specific to each curriculum area.

**COE 131 Co-op Work Experience III (0-0-10-1)**

Prerequisites: Any COE I & II Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 132 Co-op Work Experience III (0-0-20-2)**

Prerequisites: Any COE I & III Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work

experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 133 Co-op Work Experience III (0-0-30-3)**

Prerequisites: Any COE I & II Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 134 Co-op Work Experience III (0-0-40-4)**

Prerequisites: Any COE I & II Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 135 Work Exp Seminar III (1-0-0-1)**

Prerequisites: None

Corequisites: Departmental Approval

This course description may be written by the individual colleges. This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students will be able to make better career decisions and choices. Course may be customized specific to each curriculum area.

**COE 211 Co-op Work Experience IV (0-0-10-1)**

Prerequisites: Any COE I, II and III

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 212 Co-op Work Experience IV (0-0-20-2)**

Prerequisites: Any COE I, II and III

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.



**COE 213 Co-op Work Experience IV (0-0-30-3)**

Prerequisites: Any COE I, II and III

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 214 Co-op Work Experience IV (0-0-40-4)**

Prerequisites: Any COE I, II and III

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 215 Work Exp Seminar IV (1-0-0-1)**

Prerequisites: None

Corequisites: Departmental Approval

This course description may be written by the individual colleges. This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students will be able to make better career decisions and choices. Course may be customized specific to each curriculum area.

**COE 221 Co-op Work Experience V (0-0-10-1)**

Prerequisites: Any COE I, II, III and IV

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 222 Co-op Work Experience V (0-0-20-2)**

Prerequisites: Any COE I, II, III and IV

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 223 Co-op Work Experience V (0-0-30-3)**

Prerequisites: Any COE I, II, III and IV

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the

student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 224 Co-op Work Experience V (0-0-40-4)**

Prerequisites: Any COE I, II, III and IV

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 225 Work Exp Seminar V(1-0-0-1)**

Prerequisites: None

Corequisites: Departmental Approval

This course description may be written by the individual colleges. This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students will be able to make better career decisions and choices. Course may be customized specific to each curriculum area.

**COE 231 Co-op Work Experience VI (0-0-10-1)**

Prerequisites: Any COE I, II, III, IV and V

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 232 Co-op Work Experience V1 (0-0-20-2)**

Prerequisites: Any COE I, II, III, IV and V

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 233 Co-op Work Experience V1 (0-0-30-3)**

Prerequisites: Any COE I, II, III, IV and V

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.



**COE 234 Co-op Work Experience VI (0-0-40-4)**

Prerequisites: Any COE I, II, III, IV and V

Work Experience

Corequisites: None

This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**COE 235 Work Exp Seminar VI (1-0-0-1)**

Prerequisites: None

Corequisites: Departmental Approval

This course description may be written by the individual colleges. This course provides information for career development through emphasis on self-exploration and awareness of the world of work. Upon completion, students will be able to make better career decisions and choices. Course may be customized specific to each curriculum area.

**Communications****COM 110 Introduction to Communication (3-0-0-3)**

Prerequisites: ENG 090, RED 090, or  
Departmental Approval

Corequisites: None

This course provides an overview of the basic concepts of communication and the skills necessary to communicate in various contexts. Emphasis is placed on communication theories and techniques used in interpersonal group, public, intercultural, and mass communication situations. Upon completion, students should be able to explain and illustrate the forms and purposes of human communication in a variety of contexts. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in speech/communication.

**COM 231 Public Speaking (3-0-03)**

Prerequisites: ENG 101 or ENG 111

Corequisites: None

This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in speech/communication.

**Computer Science****CSC 129 Technical Programming (2-3-0-3)**

Prerequisites: None

Corequisites: MAT 121

This course introduces the analysis of technical

problems by using different software tools. Emphasis is placed on solving technical problems using structured programming logic and tools such as a computer language, spreadsheet software, or an advanced programmable calculator. Upon completion, students should be able to derive solutions to complex technical problems using various software tools.

**CSC 134 C++ Programming (2-3-0-3)**

Prerequisites: CIS 115

Corequisites: None

This course introduces object-oriented computer programming using the C++ programming language. Topics include input/output operations, iteration, arithmetic operations, arrays, pointers, filters, and other related topics. Upon completion, students should be able to design, code, test, and debug C++ language programs. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

**CSC 135 COBOL Programming (2-3-0-3)**

Prerequisites: CIS 115

Corequisites: None

This course introduces computer programming using the COBOL programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/tables, and other related topics. Upon completion, students should be able to design, code, test, and debug COBOL language programs.

**CSC 138 RPG Programming (2-3-0-3)**

Prerequisites: CIS 115

Corequisites: None

This course introduces computer programming using the RPG programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays/tables, and other related topics. Upon completion, students should be able to design, code, test, and debug RPG language programs.

**CSC 139 Visual BASIC Programming (2-3-0-3)**

Prerequisites: CIS 115, CIS 147

Corequisites: None

This course introduces event-driven computer programming using the Visual BASIC programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, forms, sequential files, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual BASIC language programs.

**CSC 141 Visual C++ Programming (2-3-0-3)**

Prerequisites: CIS 115, CIS 147

Corequisites: None

This course introduces event-driven computer programming using the Visual C++ programming language. Topics include input/output operations, sequence, selection, iteration, arithmetic operations, arrays, and other related topics. Upon completion, students should be able to design, code, test, and debug Visual C++ language programs.



**CSC 148 JAVA Programming (2-3-0-3)**

Prerequisites: CIS 115

Corequisites: None

This course introduces computer programming using the JAVA language. Topics include selection, iteration, arithmetic and logical operators, classes, inheritance, methods, arrays, user interfaces, basic applet creation and other related topics. Upon completion, students should be able to design, code, test, and debug JAVA language programs.

**CSC 160 Intro to Internet Prog (2-2-0-3)**

Prerequisites: CIS 172

Corequisites: None

The course introduces client-side Internet programming using HTML and Javascript. Topics include use of frames and tables, use of meta tags, and Javascript techniques for site navigation. Upon completion, students should be able to write HTML documents that incorporate programming to provide web page organization and navigation functions.

**CSC 235 Advanced COBOL (2-3-0-3)**

Prerequisites: CSC 135

Corequisites: None

This course is a continuation of CSC 135 using COBOL with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

**CSC 238 Advanced RPG (2-3-0-3)**

Prerequisites: CSC 138

Corequisites: None

This course is a continuation of CSC 138 using RPG with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

**CSC 239 Advanced Visual BASIC (2-3-0-3)**

Prerequisites: CSC 139

Corequisites: None

This course is a continuation of CSC 139 using Visual BASIC with structured programming principles. Emphasis is placed on advanced arrays/tables, file management/processing techniques, data structures, sub-programs, interactive processing, sort/merge routines, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

**CSC 241 Advanced Visual C++ (2-3-0-3)**

Prerequisites: CSC 141

Corequisites: None

This course is a continuation of CSC 141 using Visual C++ with object-oriented programming principles. Emphasis is placed on advanced arrays, file management/processing techniques, data structures, sub-programs, interactive processing, algorithms, and libraries. Upon completion, students should be able to design, code, test, debug, and document programming solutions.

**Design - See ART****Design Drafting****DDF 211 Design Drafting I (2-6-0-4)**

Prerequisites: DFF 112

Corequisites: None

This course emphasizes design processes for finished products. Topics include data collection from manuals and handbooks, efficient use of materials, design sketching, specifications, and vendor selection. Upon completion, students should be able to research and plan the design process for a finished product.

**DDF 214 Tool Design (2-4-0-4)**

Prerequisites: DDF 212

Corequisites: None

This course introduces the principles of tool design. Topics including gaging, die work, and cost analysis using available catalogs and studies using manufacturing processes. Upon completion, students should be able to use catalogs to identify vendors and prepare working drawings for tooling. Oral and written communications skills will be emphasized.

**Dietetic Technician****DET 110 Dietetic Technician I (6-0-6-8)**

Prerequisites: None

Corequisites: None

This course introduces concepts basic to the role of the dietetic technician. Emphasis is placed on community health agencies, basic nutrition throughout the life cycle, and selection of well-balanced diets for the promotion of health. Upon completion of the course students should be able to begin to apply principles of nutrition and diet planning.

**DET 115 Dietetic Technician II (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the principles of food sanitation. Emphasis is placed on the control of food-borne illnesses and contaminants including methods used to prevent contamination during preparation and storage. Upon completion of the course students should be able to apply sanitation principles in practice as a dietetic technician.

**DET 120 Dietetic Technician III (6-0-9-9)**

Prerequisites: DET 110

Corequisites: None

This course provides an expanded knowledge base for the dietetic technician. Emphasis is placed on food programs and resources available to meet nutritional needs, basic principles of therapeutic nutrition, and principles of food sanitation. Upon completion the student should be able to begin to participate in the delivery of nutritional care for health promotion or nutritional treatment for common conditions.

**DET 210 Dietetic Technician IV (6-0-9-9)**Prerequisites: DET 110, DET 120, BIO 163,  
CHM 130 and CHM 130A

Corequisites: BIO 275

This course provides an expanded knowledge base in therapeutic nutrition. Emphasis is placed on nutritional assessment throughout the life span,



principles of teaching/learning and principles of managing nutritional programs. Upon completion students should be able to assess nutritional status and design menus for individuals with common medical conditions and provide nutritional education.

**DET 220 Dietetic Technician V (6-0-9-9)**

Prerequisites: None

Corequisites: None

This course provides an expanded knowledge base in the management of nutrition programs. Emphasis is placed on the application of food production, food service, and nutritional care principles in a health care environment under supervision. Upon completion the student should be able to participate in the management of a nutritional program.

**DET 225 Dietetic Technician VI (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore issues related to the practice of the Dietetic Technician. Emphasis is placed on ethical, legal, professional, and political issues. Upon completion the student should be able to discuss issues relating to the practice of the Dietetic Technician.

**Drafting**

**DFT 111 Technical Drafting I (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course introduces basic drafting skills, equipment, and applications. Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorials drawings, sections, and auxiliary views. Upon completion, students should be able to understand and apply basic drawing principles and practices.

**DFT 111A Technical Drafting I Lab (0-3-1)**

Prerequisite: None

Corequisites: DFT 111

This course provides a laboratory setting to enhance basic drafting skills. Emphasis is placed on practical experiences that enhance the topics presented in DFT 111. Upon completion, students should be able to apply the laboratory experiences to concepts presented in DFT 111.

**DFT 112 Technical Drafting II (1-3-0-2)**

Prerequisites: DFT 111

Corequisites: None

This course provides for advanced drafting practices and procedures. Topics include detailed working drawings, hardware, fits and tolerances, assembly and sub-assembly, geometric dimensioning and tolerancing, intersections, and developments. Upon completion, students should be able to produce detailed working drawings.

**DFT 112A Technical Drafting II Lab (0-3-1)**

Prerequisite: DFT 111, DFT 111A

Corequisites: DFT 112

This course provides a laboratory setting to enhance basic drafting skills. Emphasis is placed on practical experiences that enhance the topics presented in DFT 112. Upon completion, students

should be able to apply the laboratory experiences to concepts presented in DFT 112.

**DFT 121 Intro to GD & T (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course introduces basic geometric dimensioning and tolerancing principles. Topics include symbols, annotation, theory, and applications. Upon completion, students should be able to interpret and apply basic geometric dimensioning and tolerancing principles to drawings.

**DFT 151 CAD I (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing.

**DFT 152 CAD II (2-3-0-3)**

Prerequisites: DFT 151 Corequisites: None

This course is a continuation of DFT 151. Topics include advanced two-dimensional, three dimensional, and solid modeling and extended CAD applications. Upon completion, students should be able to generate and manage CAD drawings and models to produce engineering documents.

**DFT 153 CAD III (2-3-0-3)**

Prerequisites: DFT 111, DFT 151

Corequisites: None

This course covers basic principles of three dimensional CAD wireframe and surface models. Topics include user coordinate systems, three dimensional viewpoints, three-dimensional wireframes, and surface components and viewpoints. Upon completion, students should be able to create and manipulate three-dimensional wireframe and surface models.

**DFT 170 Engineering Graphics (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces basic engineering graphics skills, equipment, and applications (manual and computer-aided). Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorial drawings, and sectional and auxiliary views. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**DFT 211 Gears, Cams, & Pulleys (1-3-0-2)**

Prerequisites: DFT 111, MAT 121

Corequisites: None

This course introduces the principles of motion transfer. Topics include gears, cams, pulleys, and drive components. Upon completion, students should be able to solve problems and produce drawings dealing with ratios.



**DFT 231 Jig & Fixture Design (1-2-0-2)**

Prerequisites: DFT 112 and MEC 210

Corequisites: None

This course introduces the study of jigs and fixtures. Topics include different types, components, and uses of jigs and fixtures. Upon completion, students should be able to analyze, design, and complete a set of working drawings for a jig or fixture. Oral and written communications skills will be emphasized.

**Electronic Commerce****ECM 168 Electronic Business (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course provides a survey of the world of electronic business. Topics include the definition of electronic business, current practices as they evolve using Internet strategy in business, and application of basic business principles to the world of e-commerce. Upon completion, students should be able to define electronic business and demonstrate an understanding of the benefits of e-commerce as a foundation for developing plans leading to electronic business implementation.

**ECM 210 Intro to E-Commerce (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the concepts and tools to implement electronic commerce via the Internet. Topics include application and server software selection, securing transactions, use and verification of credit cards, publishing of catalogs, and site administration. Upon completion, students should be able to setup a working e-commerce Internet web site.

**ECM 220 E-Commerce Planning & Implementation (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course builds on currently accepted business practices to develop a business plan and implementation model for e-commerce. Topics include analysis and synthesis of the planning cycle, cost/benefit analysis, technical systems, marketing, security, financial support, Internet strategies, website design, customer support and feedback and assessment. Upon completion, students should be able to develop a plan for e-commerce in a small to medium size business.

**ECM 225 Electronic Marketing (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course provides a survey of the world of electronic business. Topics include the definition of electronic business, current practices as they evolve using Internet strategy in business, and application of basic business principles to the world of e-commerce. Upon completion, students should be able to define electronic business and demonstrate an understanding of the benefits of e-commerce as a foundation for developing plans leading to electronic business implementation.

**ECM 230 Capstone Project (2-2-0-3)**

Prerequisites: ECM 220

Corequisites: None

This course provides experience in Electronic Commerce. Emphasis is placed on the implementation of an e-commerce model for an existing business. Upon completion, students should be able to successfully develop and implement a plan for e-commerce in a small to medium size business.

**Economics****ECO 151 Survey of Economics (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course, for those who have not received credit for ECO 251 or 252, introduces basic concepts of micro- and macroeconomics. Topics include supply and demand, optimizing economic behavior, prices and wages, money, interest rates, banking system, unemployment, inflation, taxes, government spending, and international trade. Upon completion, students should be able to explain alternative solutions for economic problems faced by private and government sectors. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

**ECO 251 Prin of Microeconomics (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces economic analysis of individual, business, and industry in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

**ECO 252 Prin of Macroeconomics (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.



## **Education**

### **EDU 111 Early Childhood Cred I (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces early childhood education and the role of the teacher in environments that encourage exploration and learning. Topics include professionalism, child growth and development, individuality, family, and culture. Upon completion, students should be able to identify and demonstrate knowledge of professional roles, major areas of child growth and development, and diverse families.

### **EDU 112 Early Childhood Cred II (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces developmentally appropriate practices, positive guidance, and standards of health, safety, and nutrition. Topics include the learning environment, planning developmentally appropriate activities, positive guidance techniques, and health, safety, and nutrition standards. Upon completion, students should be able to demonstrate developmentally appropriate activities and positive guidance techniques and describe health/saDitation/nutrition practices that promote healthy environments for children.

### **EDU 113 Family/Early Child Cred (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers business/professional practices for family early childhood providers, developmentally appropriate practices, positive guidance, and methods of providing a safe and healthy environment. Topics include developmentally appropriate practices; health, safety and nutrition; and business and professionalism. Upon completion, students should be able to develop a handbook of policies, procedures and practices for a family child care home.

### **EDU 119 Early Childhood Ed (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course covers the foundations of the education profession, types of programs, professionalism, and planning quality programs for children. Topics include historical foundations, career options, types of programs, professionalism, observational skills, and planning developmentally appropriate schedules, environments, and activities for children. Upon completion, students should be able to demonstrate observational skills, identify appropriate schedules and environments, develop activity plans, and describe influences on the profession.

### **EDU 131 Child, Family, & Commun (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the relationships between the families, programs for children/schools, and the community. Emphasis is placed on establishing and maintaining positive collaborative relationships with families and community resources. Upon completion, students should be able to demonstrate

strategies for effectively working with diverse families and identifying and utilizing community resources.

### **EDU 144 Child Development I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the theories of child development and the developmental sequences of children from conception through the pre-school years for early childhood educators. Emphasis is placed on sequences in physical/motor, social, emotional, cognitive, and language development and appropriate experiences for the young child. Upon completion, students should be able to identify developmental milestones, plan experiences to enhance development, and describe appropriate interaction techniques and environment for typical/atypical development.

### **EDU 145 Child Development II (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers theories of child development and developmental sequences of children from pre-school through middle childhood for early childhood educators. Emphasis is placed on characteristics of physical/motor, social, emotional, and cognitive/language development and appropriate experiences for children. Upon completion, students should be able to identify developmental characteristics, plan experiences to enhance development, and describe appropriate interaction techniques and environments.

### **EDU 146 Child Guidance (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces practical principles and techniques for developmentally appropriate guidance. Emphasis is placed on encouraging self esteem and cultural awareness, effective communication skills, and direct and indirect guidance techniques and strategies. Upon completion, students should be able to demonstrate strategies which encourage positive social interactions, promote conflict resolution, and develop self-control, self-motivation, and self esteem in children.

### **EDU 153 Health, Safety, & Nutrit (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course focuses on promoting and maintaining the health and well-being of children. Topics include health and nutritional needs, safe and healthy environments, and recognition and reporting of child abuse and neglect. Upon completion, students should be able to set up and monitor safe indoor and outdoor environments and implement a nutrition education program.

### **EDU 155 Art & Drama for Children (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the use of visual art and drama for children. Emphasis is placed on the development of basic forms and planning, designing, and implementing visual art and drama for



children. Upon completion, students should be able to discuss the development of basic form and plan, design, and implement visual art and drama in an educational setting.

**EDU 157 Active Play (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the use of indoor and outdoor physical activities to promote the physical, cognitive, and social/emotional development of children. Topics include the role of active play, development of play skills, playground design, selection of safe equipment, and materials and surfacing for active play. Upon completion, students should be able to discuss the stages of play, the role of teachers in play, and the design of appropriate active play areas and activities.

**EDU 185 Cognitive & Lang Act (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers methods of developing cognitive and language/communication skills in children. Emphasis is placed on planning the basic components of language and cognitive processes in developing curriculum activities. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate developmentally appropriate curriculum activities.

**EDU 185A Cognitive & Lang Act Lab (0-2-0-1)**

Prerequisites: None

Corequisites: EDU 185

This course provides a laboratory component to complement EDU 185. Emphasis is placed on practical experiences that enhance concepts introduced in the classroom. Upon completion, students should be able to demonstrate a practical understanding of the development and implementation of appropriate cognitive language activities.

**EDU 221 Children with Sp Needs (3-0-0-3)**

Prerequisites: EDU 144, EDU 145, or PSY 244, PSY 245

Corequisites: None

This course introduces working with children with special needs. Emphasis is placed on the characteristics and assessment of children and strategies for adapting the home and classroom environment. Upon completion, students should be able to recognize atypical development, make appropriate referrals, and work collaboratively to plan, implement, and evaluate inclusion strategies.

**EDU 234 Infants, Toddlers, & Twos (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the skills needed to effectively implement group care for infants, toddlers, and two year olds. Emphasis is placed on child development and developmentally appropriate practices. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate a developmentally appropriate curriculum.

**EDU 235 School-Age Dev & Program (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course presents developmentally appropriate practices in group care for school-age children. Topics include principles of development, environmental planning, and positive guidance techniques. Upon completion, students should be able to discuss developmental principles for children five to twelve years of age and plan and implement age-appropriate activities.

**EDU 252 Math & Sci Activities (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces discovery experiences in math and science. Topics include concepts, facts, phenomena, and skills in each area. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate developmentally appropriate curriculum materials.

**EDU 252A Math & Sci Act Lab (0-2-0-1)**

Prerequisites: None

Corequisites: EDU 252

This course provides a laboratory component to complement EDU 252. Emphasis is placed on practical experiences that enhance concepts introduced in the classroom. Upon completion, students should be able to demonstrate a practical understanding of the development and implementation of appropriate math and science activities.

**EDU 261 Early Childhood Admin I (2-0-0-2)**

Prerequisites: EDU 111 and EDU 112

Corequisites: None

This course covers the policies, procedures, and responsibilities for the management of early childhood education programs. Topics include implementation of goals, principles of supervision, budgeting and financial management, and meeting the standards for a NC Child Day Care license. Upon completion, students should be able to develop program goals, explain licensing standards, determine budgeting needs, and describe effective methods of personnel supervision.

**EDU 262 Early Childhood Admin II (3-0-0-3)**

Prerequisites: EDU 261

Corequisites: EDU 288

This course provides a foundation for budgetary, financial, and personnel management of the child care center. Topics include budgeting, financial management, marketing, hiring, supervision, and professional development of a child care center. Upon completion, students should be able to formulate marketing, financial management, and fund development plans and develop personnel policies, including supervision and staff development plans.

**EDU 280 Literacy Experiences (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers literacy, early literacy development, and appropriate early experiences with books and writing. Emphasis is placed on reading and writing readiness, major approaches used in teach-



ing literacy, and strategies for sharing quality in children's literature. Upon completion, students should be able to select, plan, and evaluate appropriate early literacy experiences.

### **EDU 282 Early Childhood Lit (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the history, selection, and integration of literature and language in the early childhood curriculum. Topics include the history and selection of developmentally appropriate children's literature and the use of books and other media to enhance language and literacy in the classroom. Upon completion, students should be able to select appropriate books for storytelling, reading aloud, puppetry, flannel board use, and other techniques.

### **EDU 288 Adv Issues/Early Child Ed (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers advanced topics and issues in early childhood. Emphasis is placed on current advocacy issues, emerging technology, professional growth experiences, and other related topics. Upon completion, students should be able to list, discuss, and explain advanced current topics and issues in early childhood education.

## **Pre-Engineering**

### **EGR 115 Intro to Technology (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course introduces the basic skills and career fields for technicians. Topics include career options, technical vocabulary, dimensional analysis, measurement systems, engineering graphics, calculator applications, professional ethics, safety practices, and other related topics. Upon completion, students should be able to demonstrate an understanding of the basic technologies, prepare drawings and sketches, and perform computations using a scientific calculator. Computers and selected software packages will be introduced; individual and team problem-solving techniques will be emphasized.

### **EGR 130 Engineering Cost Control (2-2-0-3)**

Prerequisites: MAT 121, MAT 161 or MAT 171

Corequisites: None

This course covers the management of projects and systems through the control of costs. Topics include economic analysis of alternatives within budget constraints and utilization of the time value of money approach. Upon completion, students should be able to make choices that optimize profits on both short-term and long-term decisions. Incorporated into the course are concepts covering accounting methodology, cost systems including activity-based costing, and cost estimating practices.

### **EGR 285 Design Project (0-4-0-2)**

Prerequisites: ELN 232 or ISC 243 or MEC 250

Corequisites:

This course provides the opportunity to design and construct an instructor-approved project using previously acquired skills. Emphasis is placed on

selection, proposal, design, construction, testing, and documentation of the approved project. Upon completion, students should be able to present and demonstrate operational projects. Oral and written communications skills will be emphasized.

## **Electrical Technology**

### **ELC 111 Intro, to Electricity (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the fundamental concepts of electricity and test equipment to non-electrical/electronics majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.

### **ELC 112 DC/AC Electricity (3-6-0-5)**

Prerequisites: None

Corequisites: None

This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, and analyze simple DC/AC circuits.

### **ELC 113 Basic Wiring I (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course introduces the care/usage of tools and materials used in electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety, and electrical blueprint reading; planning, layout; and installation of electrical distribution equipment; lighting; overcurrent protection; conductors; branch circuits; and conduits. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with basic electrical installations.

### **ELC 114 Basic Wiring II (2-6-0-4)**

Prerequisites: ELC 113

Corequisites: None

This course provides additional instruction in the application of electrical tools, materials, and test equipment associated with electrical installations. Topics include the NEC; safety; electrical blueprints; planning, layout, and installation of equipment and conduits; and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with electrical installations.

### **ELC 115 Industrial Wiring (2-6-0-4)**

Prerequisites: ELC 113

Corequisites: None

This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment.



**ELC 117 Motors and Controls (2-6-0-4)**

Prerequisites: ELC 112, ELC 131

Corequisites: None

This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

**ELC 118 National Electrical Code (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers the use of the current National Electrical Code. Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

**ELC 119 NEC Calculations (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers branch circuit, feeder, and service calculations. Emphasis is placed on sections of the National Electrical Code related to calculations. Upon completion, students should be able to use appropriate code sections to size wire, conduit, and overcurrent devices for branch circuits, feeders, and service.

**ELC 126 Electrical Computations (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the fundamental applications of mathematics which are used by an electrical/electronics technician. Topics include whole numbers, fractions, decimals, powers, roots, simple electrical formulas, and usage of a scientific calculator. Upon completion, students should be able to solve simple electrical mathematical problems.

**ELC 128 Intro to PLC (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to install PLCs and create simple programs.

**ELC 131 DC/AC Circuit Analysis (4-3-0-5)**

Prerequisites: None

Corequisites: MAT 121

This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation software, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment.

**ELC 133 Adv. Circuit Analysis (2-3-0-3)**

Prerequisites: ELC 131

Corequisites: MAT 122

This course covers additional concepts of DC/AC electricity, the use of test equipment, and measurement techniques for electrical/electronics majors. Topics include the application of network theorems such as delta/wye transformations, Superposition Theorem, and other advanced circuit analysis principles. Upon completion, students should be able to construct and analyze DC/AC circuits, use advanced circuit analysis theorems, circuit simulators, and test equipment.

**ELC 135 Electrical Machines I (2-2-0-3)**

Prerequisites: ELC 131, ELC 112, ELC 140

Corequisites: None

This course covers magnetic circuits, transformers, DC/AC generators, and a review of the three-phase circuit fundamentals including power factor. Topics include magnetic terms and calculations, transformer calculations based on primary or secondary equivalent circuits, and generator regulation and efficiency calculations. Upon completion, students should be able to perform regulation and efficiency calculations for DC/AC single- and three-phase transformer and generator circuits.

**ELC 140 Fund of DC/AC Circuit (5-6-0-7)**

Prerequisites: None

Corequisites: None

This course covers the principles of DC/AC circuit analysis as applied to electronics. Topics include atomic theory, circuit analysis, components, test equipment, troubleshooting techniques, schematics, diagrams, and other related topics. Upon completion, students should be able to interpret, construct, verify, analyze, and troubleshoot DC/AC circuits in a safe manner.

**ELC 228 PLC Applications (2-6-0-4)**

Prerequisites: ELC 128

Corequisites: None

This course continues the study of the programming and applications of programmable logic controllers. Emphasis is placed on advanced programming, networking, advanced I/O modules, reading and interpreting error codes, and troubleshooting. Upon completion, students should be able to program and troubleshoot programmable logic controllers.

**ELC 231 Electric Power Systems (3-2-0-4)**

Prerequisites: ELC 131

Corequisites: None

This course covers the basic principles of electric power systems, including transmission lines, generator and transformer characteristics, and fault detection and correction. Emphasis is placed on line diagrams and per unit calculations for circuit performance analysis in regards to voltage regulation, power factor, and protection devices. Upon completion, students should be able to analyze simple distribution subsystems, calculate fault current, and determine the size and type of circuit protection devices. Oral and written communications skills will be emphasized.



## **Electronics Technology**

### **ELN 131 Electronic Devices (3-3-0-4)**

Prerequisites: ELC 112 or ELC 140  
OR ELC 131 and PHY 132

Corequisites: None

This course includes semiconductor-based devices such as diodes, bipolar transistors, FETs, thermistors, and related components. Emphasis is placed on analysis, selection, biasing, and applications in power supplies, small signal amplifiers, and switching and control circuits. Upon completion, students should be able to construct, analyze, verify, and troubleshoot discrete component circuits using appropriate techniques and test equipment.

### **ELN 132 Linear IC Applications (3-3-0-4)**

Prerequisites: ELN 131 and ELC 133

Corequisites: None

This course introduces the characteristics and applications of linear integrated circuits. Topics include op-amp circuits, differential amplifiers, instrumentation amplifiers, waveform generators, active filters, PLLs, and IC voltage regulators. Upon completion, students should be able to construct, analyze, verify, and troubleshoot linear integrated circuits using appropriate techniques and test equipment. Integrated circuit fabrication is also covered.

### **ELN 133 Digital Electronics (3-3-0-4)**

Prerequisites: ELC 112, ELC 131, ELC 140  
or ELC 111

Corequisites: None

This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, MSI and LSI circuits, AD/DA conversion, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

### **ELN 150 CAD for Electronics (1-3-0-2)**

Prerequisites: CIS 110 or CIS 111  
or CSC 129

Corequisites: None

This course introduces computer-aided drafting (CAD) with an emphasis on applications in the electronics field. Topics include electronics industry standards (symbols, schematic diagrams, layouts); drawing electronic circuit diagrams; and specialized electronic drafting practices and components such as resistors, capacitors, and ICs. Upon completion, students should be able to prepare electronic drawings with CAD software.

### **ELN 154 Intro to Data Comm (2-3-0-3)**

Prerequisites: ELN 133

Corequisites: None

This course introduces the principal elements and theory (analog and digital techniques) of data communication systems and how they are integrated as a complete network. Topics include an overview of data communication, OSI model, transmission modes, serial and parallel interfaces, applications of ICs, protocols, network configurations, modems,

and related applications. Upon completion, students should be able to demonstrate knowledge of the concepts associated with data communication systems and high speed networks.

### **ELN 229 Industrial Electronics (2-4-0-4)**

Prerequisites: ELC 112, ELC 131 or ELC 140

Corequisites: None

This course covers semiconductor devices used in industrial applications. Topics include the basic theory, application, and operating characteristics of semiconductor devices (filters, rectifiers, FET, SCR, Diac, Triac, Op-amps, etc). Upon completion, students should be able to install and/or troubleshoot these devices for proper operation in an industrial electronic circuit. Oral and written communications skills will be emphasized.

### **ELN 232 Intro to Microprocessors (3-3-0-4)**

Prerequisites: ELN 133

Corequisites: None

This course introduces microprocessor architecture and microcomputer systems including memory and input/output interfacing. Topics include assembly language programming, bus architecture, bus cycle types, I/O systems, memory systems, interrupts, and other related topics. Upon completion, students should be able to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and test equipment. Oral and written communications skills will be emphasized.

### **ELN 233 Microprocessor Systems (3-3-0-4)**

Prerequisites: ELN 232

Corequisites: None

This course covers the application and design of microprocessor control systems. Topics include control and interfacing of systems using AD/DA, serial/parallel I/O, communication protocols, and other related applications. Upon completion, students should be able to design, construct, program, verify, analyze, and troubleshoot fundamental microprocessor interface and control circuits using related equipment.

### **ELN 234 Communication Systems (3-3-0-4)**

Prerequisites: ELN 132 or ELN 140

Corequisites: None

This course introduces the fundamentals of electronic communication systems. Topics include the frequency spectrum, electrical noise, modulation techniques, characteristics of transmitters and receivers, and digital communications. Upon completion, students should be able to interpret analog and digital communication circuit diagrams, analyze transmitter and receiver circuits, and use appropriate communication test equipment. Oral and written communications skills will be emphasized.

### **ELN 235 Data Communication Systems (3-3-0-4)**

Prerequisites: ELN 133

Corequisites: None

This course covers data communication systems and the transmission of digital information from



source to destination. Topics include data transmission systems, serial interfaces and modems, protocols, networks, and other related topics. Upon completion, students should be able to demonstrate knowledge of the concepts associated with data communication systems. Oral and written communications skills will be emphasized.

### **ELN 237 Local Area Networks (2-3-0-3)**

Prerequisites: CIS 110 or CIS 111

Corequisites: None

This course introduces the fundamentals of local area networks and their operation in business and computer environments. Topics include the characteristics of network topologies, system hardware (repeaters, bridges, routers, gateways), system configuration, and installation and administration of the LAN. Upon completion, students should be able to install, maintain, and manage a local area network.

### **ELN 240 Microprocessor Fund (3-3-0-4)**

Prerequisites: ELN 141

Corequisites: None

This course introduces microprocessor architecture and microcomputer systems. Topics include use of technical documentation, bus architecture, I/O and memory systems, and other related topics. Upon completion, students should be able to analyze and troubleshoot basic microprocessor circuits.

### **ELN 244 Computer Repair (3-6-0-5)**

Prerequisites: ELN 133, ELN 141

Corequisites: None

This course covers the assembly, upgrading, and repair of microcomputers. Topics include logic test equipment, computer motherboards, storage devices, I/O devices, power supplies, and other peripherals. Upon completion, students should be able to assemble, upgrade, maintain, troubleshoot, and repair microcomputers.

### **ELN 246 Cert Elect Tech Prep (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers electronic principles, theories, and concepts. Emphasis is placed on those items covered in the Certified Electronic Technician examination. Upon completion, students should be able to demonstrate competence in electronics and be prepared for the Certified Electronic Technician examination.

## **Emergency Medical Science**

### **EMS 110 EMT-Basic (4-6-0-6)**

Prerequisites: Departmental Approval

Corequisites: EMS 111

This course introduces basic emergency medical care. Topics include preparatory, airway, patient assessment, medical emergencies, trauma, infants and children, and operations. Upon completion, students should be able to demonstrate the skills necessary to achieve North Carolina State or National Registry EMT-Basic certification.

### **EMS 111 Prehospital Environment (2-2-0-3)**

Prerequisites: Departmental Approval

Corequisites: EMS 111

This course introduces the prehospital care environment and is required for all levels of EMT certification. Topics include roles, responsibilities, laws, ethics, communicable diseases, hazardous materials recognition, therapeutic communications, EMS systems, and defense tactics. Upon completion, students should be able to demonstrate competence in rules and regulations governing prehospital care and personal protection.

### **EMS 115 Defense Tactics for EMS (1-3-0-2)**

Prerequisites: Enrollment in EMS program

Corequisites: None

This course is designed to provide tactics that can be used for self-protection in dangerous and violent situations. Emphasis is placed on prediction, recognition, and response to dangerous and violent situations. Upon completion, students should be able to recognize potentially hostile situations and protect themselves during a confrontation.

### **EMS 120 Intermediate Interventions (2-3-0-3)**

Prerequisites: BIO 165 or Departmental Approval

Corequisites: COE 111, EMS 121, EMS 122, EMS 130, EMS 131

Current NC-Emergency Medical Technician certificate is required for students enrolling in this course. This course is designed to provide the necessary information for interventions appropriate to the EMT-Intermediate and is required for intermediate certification. Topics include automated external defibrillation, basic cardiac electrophysiology, intravenous therapy, venipuncture, acid-base balance, and fluids and electrolytes. Upon completion, students should be able to properly establish an IV line, obtain venous blood, utilize AEDs, and correctly interpret arterial blood gases. Current NC-Emergency Medical Technician certificate is required for students enrolling in this course.

### **EMS 121 EMS Clinical Practicum I (0-0-6-2)**

Prerequisites: BIO 165 or Departmental Approval

Corequisites: BIO 166, EMS 120, EMS 130, EMS 131

This course is the initial hospital and field internship and is required for intermediate and paramedic certification. Emphasis is placed on intermediate-level care. Upon completion, students should be able to demonstrate competence with intermediate-level skills.

### **EMS 125 EMS Instructor Methodology (1-2-0-2)**

Prerequisites: Enrollment in EMS program

Corequisites: None

This course covers the information needed to develop and instruct EMS courses. Topics include instructional methods, lesson plan development, time management skills, and theories of adult learning. Upon completion, students should be able to teach EM courses and meet the North Carolina EMS requirements for instructor methodology.



**EMS 130 Pharmacology I for EMS (1-3-0-2)**

Prerequisites: EMS 111, BIO 165

or Departmental Approval

Corequisites: EMS 120, EMS 130, EMS 131

This course introduces the fundamental principles of pharmacology and medication administration and is required for intermediate and paramedic certification. Topics include terminology, pharmacokinetics, pharmacodynamics, weights, measures, drug calculations, legislation, and administration routes. Upon completion, students should be able to accurately calculate drug dosages, properly administer medications, and demonstrate general knowledge of pharmacology.

**EMS 131 Advanced Airway Management (1-2-0-2)**

Prerequisites: EMS 111, BIO 165

or Departmental Approval

Corequisites: EMS 120, EMS 130

This course is designed to provide advanced airway management techniques and is required for intermediate and paramedic certification. Topics include respiratory anatomy and physiology, airway, ventilation, adjuncts, surgical intervention, and rapid sequence intubation. Upon completion, students should be able to properly utilize all airway adjuncts and pharmacology associated with airway control and maintenance.

**EMS 140 Rescue Scene Management (1-6-0-3)**

Prerequisites: None or Departmental Approval

Corequisites: None

This course introduces rescue scene management and is required for paramedic certification. Topics include response to hazardous material conditions, medical incident command, and extrication of patients from a variety of situations. Upon completion, students should be able to recognize and manage rescue operations based upon initial and follow-up scene assessment.

**EMS 150 Emergency Vehicles & EMS Comm (1-3-0-2)**

Prerequisites: None or Departmental Approval

Corequisites: None

This course examines the principles governing emergency vehicles, maintenance of emergency vehicles, and EMS communication equipment and is required for paramedic certification. Topics include applicable motor vehicle laws affecting emergency vehicle operation, defensive driving, collision avoidance techniques, communication systems, and information management systems. Upon completion, students should have a basic knowledge of emergency vehicles, maintenance, and communication needs.

**EMS 210 Advanced Patient Assessment (1-3-0-2)**

Prerequisites: EMS 120, EMS 130, EMS 131,  
EMS 121, EMS 122

Corequisites: None

This course covers advanced patient assessment techniques and is required for paramedic certification. Topics include initial assessment, medical-trauma history, field impression, complete physical exam process, on-going assessment, and

documentation skills. Upon completion, students should be able to utilize basic communication skills and record and report collected patient data.

**EMS 220 Cardiology (2-6-0-4)**

Prerequisites: EMS 121, EMS 120, EMS 130,  
EMS 131

Corequisites: EMS 221

This course provides an in-depth study of cardiovascular emergencies and is required for paramedic certification. Topics include anatomy and physiology, pathophysiology, rhythm interpretation, cardiac pharmacology, and patient treatment. Upon completion, students should be able to certify at the Advanced Cardiac Life Support Provider level utilizing American Heart Association guidelines.

**EMS 221 EMS Clinical Practicum II (0-0-9-3)**

Prerequisites: EMS 120, EMS 130, EMS 131

Corequisites: EMS 220, EMS 210,

Current NC EMT Certification is required for students enrolling in this course. This course is a continuation of the hospital and field internship required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care. Current NC EMT Certification is required for students enrolling in this course.

**EMS 222 EMS Hospital Clinical II (0-0-6-2)**

Prerequisites: EMS 122 or EMS 121

Corequisites: COE 121

This course is a continuation of the hospital clinical required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

**EMS 231 EMS Clinical Pract III (0-0-9-3)**

Prerequisites: EMS 221, EMS 222, COE 121

Corequisites: None

This course is a continuation of the hospital and field internship required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

**EMS 232 EMS Hospital Clinical III (0-0-6-2)**

Prerequisites: EMS 221

Corequisites: COE 131

This course is a continuation of the hospital clinical required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

**EMS 235 EMS Management (2-0-0-2)**

Prerequisites: Departmental Approval

Corequisites: None

This course stresses the principles of managing a modern emergency medical service system. Topics include structure and function of municipal governments, EMS grantsmanship, finance, regulatory agencies, system management, legal issues, and other topics relevant to the EMS manager. Upon



completion, students should be able to understand the principles of managing emergency medical service delivery systems.

**EMS 240 Special Needs Patients (1-3-0-2)**

Prerequisites: Departmental Approval

Corequisites: EMS 241

This course includes concepts of crisis intervention and techniques of dealing with special needs patients and is required for paramedic certification. Topics include behavioral emergencies, abuse, assault, challenged patients, personal well-being, home care, and psychotherapeutic pharmacology. Upon completion, students should be able to recognize and manage frequently encountered special needs patients.

**EMS 241 EMS Clinical Practicum IV(0-0-9-3)**

Prerequisites: None

Corequisites: Current NC EMT Certification is required for students enrolling in this course.

This course is a continuation of the hospital and field internship required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to provide advanced-level patient care as an entry-level paramedic. Current NC EMT Certification is required for students enrolling in this course.

**EMS 242 EMS Hospital Clinical IV (0-0-6-2)**

Prerequisites: None or EMS 231

Corequisites: COE 211

This course is a continuation of the hospital clinical required for paramedic certification. Emphasis is placed on advanced-level care. Upon completion, students should be able to provide advanced-level patient care as an entry-level paramedic.

**EMS 250 Advanced Medical Emergencies (2-3-0-3)**

Prerequisites: EMS 210, EMS 220, EMS 221

Corequisites: EMS 231

This course provides an in-depth study of medical conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include pulmonology, neurology, endocrinology, anaphylaxis, gastroenterology, toxicology, and environmental emergencies integrating case presentation and emphasizing pharmacotherapeutics. Upon completion, students should be able to recognize and manage frequently encountered medical conditions based upon initial patient impression.

**EMS 260 Advanced Trauma Emergencies (1-3-0-2)**

Prerequisites: EMS 210, EMS 220, EMS 221

Corequisites: EMS 231

This course provides in-depth study of trauma including pharmacological interventions for conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include hemorrhage control, shock, burns, and trauma to head, spine, soft tissue, thoracic, abdominal, and musculoskeletal areas with case presentations utilized for special problems situations. Upon completion, students should be able to recognize and manage trauma situations based

upon patient impressions and should meet requirements of BTLS or PHTLS courses.

**EMS 270 Life Span Emergencies (2-2-0-3)**

Prerequisites: EMS 210, EMS 220, EMS 221

Corequisites: EMS 241

This course, required for paramedic certification, covers medical/ethical/legal issues and the spectrum of age-specific emergencies from conception through death. Topics include gynecological, obstetrical, neonatal, pediatric, and geriatric emergencies and pharmacological therapeutics. Upon completion, students should be able to recognize and treat age-specific emergencies and certify at the Pediatric Advanced Life Support Provider level.

**EMS 280 EMS Bridging Course (2-2-0-3)**

Prerequisites: Departmental Approval

Corequisites: None

This course is designed to bridge the knowledge gained in a continuing education paramedic program with the knowledge gained in an EMS curriculum program. Topics include patient assessment, documentation, twelve-lead ECG analysis, thrombolytic agents, cardiac pacing, and advanced pharmacology. Upon completion, students should be able to perform advanced patient assessment documentation using the problem oriented medical record format and manage complicated patients.

**EMS 285 EMS Capstone (1-3-0-2)**

Prerequisites: EMS 231

Corequisites: EMS 241

This course provides an opportunity to demonstrate problem-solving skills as a team leader in simulated patient scenarios and is required for paramedic certification. Emphasis is placed on critical thinking, integration of didactic and psychomotor skills, and effective performance in simulated emergency situations. Upon completion, students should be able to recognize and appropriately respond to a variety of EMS-related events.

**English**

**ENG 080 Writing Foundations (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces the writing process and stresses effective sentences. Emphasis is placed on applying the conventions of written English, reflecting standard usage and mechanics in structuring a variety of sentences. Upon completion, students should be able to write correct sentences and a unified, coherent paragraph.

**ENG 090 Composition Strategies (3-0-0-3)**

Prerequisites: ENG 080

or appropriate ASSET score

Corequisites: None

This course provides practice in the writing process and stresses effective paragraphs. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay.



**ENG 090A Comp Strategies Lab (0-2-0-1)**

Prerequisites: ENG 080

or appropriate ASSET score

Corequisites: ENG 090

This writing lab is designed to practice the skills introduced in ENG 090. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay.

**ENG 101 Applied Communications I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course is designed to enhance reading and writing skills for the workplace. Emphasis is placed on technical reading, job-related vocabulary, sentence writing, punctuation, and spelling. Upon completion, students should be able to identify main ideas with supporting details and produce mechanically correct short writings appropriate to the workplace.

**ENG 111 Expository Writing (3-0-0-3)**

Prerequisites: ENG 090, RED 090, ENG 095

Corequisites: None

This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.

**ENG 112 Argument-Based Research (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: None

This course, the second in a series of two, introduces research techniques, documentation styles, and argumentative strategies. Emphasis is placed on analyzing information and ideas and incorporating research findings into documented argumentative essays and research projects. Upon completion, students should be able to summarize, paraphrase, interpret, and synthesize information from primary and secondary sources using standard research format and style. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition. A significant component of the course will be a variety of oral presentations related to course readings and assignments, and course evaluation will reflect the activities related to oral communication competency.

**ENG 114 Prof Research & Reporting (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: None

This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpreta-

tion, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce well-designed business and professional written and oral presentations. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition. Course evaluation will reflect the students' performance on both written and oral activities.

**ENG 115 Oral Communication (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the basic principles of oral communication in both small group and public settings. Emphasis is placed on the components of the communication process, group decision-making, and public address. Upon completion, students should be able to demonstrate the principles of effective oral communication in small group and public settings.

**ENG 131 Introduction to Literature (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: ENG 112 or ENG 114

This course introduces the principal genres of literature. Emphasis is placed on literary terminology, devices, structure, and interpretation. Upon completion, students should be able to analyze and respond to literature. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**ENG 231 American Literature I (3-0-0-3)**

Prerequisites: ENG 112 or ENG 114

Corequisites: None

This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**ENG 232 American Literature II (3-0-0-3)**

Prerequisites: ENG 112 or ENG 114

Corequisites: None

This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**ENG 241 British Literature I (3-0-0-3)**

Prerequisites: ENG 112 or ENG 114

Corequisites: None

This course covers selected works in British litera-



ture from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**ENG 242 British Literature II (3-0-0-3)**

Prerequisites: ENG 112 or ENG 114

Corequisites: None

This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**ENG 272 Southern Literature (3-0-0-3)**

Prerequisites: ENG 112 or ENG 114

Corequisites: None

This course provides an analytical study of the works of several Southern authors. Emphasis is placed on the historical and cultural contexts, themes, aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ENG 273 African-American Literature (3-0-0-3)**

Prerequisites: ENG 112 or ENG 414

Corequisites: None

This course provides a survey of the development of African-American literature from its beginnings to the present. Emphasis is placed on historical and cultural context, themes, literary traditions, and backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and respond to selected texts. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**ENG 274 Literature by Women (3-0-0-3)**

Prerequisites: ENG 112 or ENG 114

Corequisites: None

This course provides an analytical study of the works of several women authors. Emphasis is placed on the historical and cultural contexts, themes and aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**Fire Protection Technology**

**FIP 120 Intro to Fire Protection (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course provides an overview of the history, development, methods, systems, and regulations as they apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and other related topics. Upon completion, students should be able to demonstrate a broad understanding of the fire protection field.

**FIP 124 Fire Prevention & Public Ed (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces fire prevention concepts as they relate to community and industrial operations. Topics include the development and maintenance of fire prevention programs, educational programs, and inspection programs. Upon completion, students should be able to research, develop, and present a fire safety program to a citizens or industrial group.

**FIP 128 Detection & Investigation (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers procedures for determining the origin and cause of accidental and incendiary fires. Topics include collection and preservation of evidence, detection and determination of accelerants, courtroom procedure and testimony, and documentation of the fire scene. Upon completion, students should be able to conduct a competent fire investigation and present those findings to appropriate officials or equivalent.

**FIP 132 Building Construction (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the principles and practices related to various types of building construction, including residential and commercial, as impacted by fire conditions. Topics include types of construction and related elements, fire resistive aspects of construction materials, building codes, collapse, and other related topics. Upon completion, students should be able to understand and recognize various types of construction and their positive or negative aspects as related to fire conditions.

**FIP 136 Inspections & Codes (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the fundamentals of fire and building codes and procedures to conduct an inspection. Topics include review of fire and building codes, writing inspection reports, identifying hazards, plan reviews, site sketches, and other related topics. Upon completion, students should be able to conduct a fire code compliance inspection and produce a written report.



**FIP 140 Industrial Fire Protect (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers fire protection systems in industrial facilities. Topics include applicable health and safety standards, insurance carrier regulations, other regulatory agencies, hazards of local industries, fire brigade operation, and loss prevention programs. Upon completion, students should be able to prepare a procedure to plan, organize, and evaluate an industrial facility's fire protection

**FIP 144 Sprinklers & Auto Alarms (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces various types of automatic sprinklers, standpipes, and fire alarm systems. Topics include wet or dry systems, testing and maintenance, water supply requirements, fire detection and alarm systems, and other related topics. Upon completion, students should be able to demonstrate a working knowledge of various sprinkler and alarm systems and required inspection and maintenance.

**FIP 152 Fire Protection Law (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers fire protection law. Topics include torts, legal terms, contracts, liability, review of case histories, and other related topics. Upon completion, students should be able to discuss laws, codes, and ordinances as they relate to fire protection.

**FIP 220 Fire Fighting Strategies (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides preparation for command of initial incident operations involving emergencies within both the public and private sector. Topics include incident management, fire-ground tactics and strategies, incident safety, and command/control of emergency operations. Upon completion, students should be able to describe the initial incident system as it relates to operations involving various emergencies in fire and non-fire situations.

**FIP 224 Instructional Methodology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the knowledge, skills, and abilities needed to train others in fire service operations. Topics include planning, presenting, and evaluating lesson plans, learning styles, use of media, communication, and other related topics. Upon completion, students should be able to meet all requirements of NFPA 1041 Fire Service Instructor Level Two.

**FIP 228 Local Govt Finance (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces local governmental financial principles and practices. Topics include budget preparation and justification, revenue policies, statutory requirements, taxation, audits, and the

economic climate. Upon completion, students should be able to comprehend the importance of finance as it applies to the operation of a department.

**FIP 230 Chem of Hazardous Mat I (5-0-0-5)**

Prerequisites: None

Corequisites: None

This course covers the evaluation of hazardous materials. Topics include use of the periodic table, hydrocarbon derivatives, placards and labels, parameters of combustion, and spill and leak mitigation. Upon completion, students should be able to demonstrate knowledge of the chemical behavior of hazardous materials.

**FIP 232 Hydraulics & Water Dist (2-2-0-3)**

Prerequisites: MAT 115

Corequisites: None

This course covers the flow of fluids through fire hoses, nozzles, appliances, pumps, standpipes, water mains, and other devices. Emphasis is placed on supply and delivery systems, fire flow testing, hydraulic calculations, and other related topics. Upon completion, students should be able to perform hydraulic calculations, conduct water availability tests, and demonstrate knowledge of water distribution systems.

**FIP 236 Emergency Management (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers the four phases of emergency management: mitigation, preparedness, response, and recovery. Topics include organizing for emergency management, coordinating for community resources, public sector liability, and the roles of government agencies at all levels. Upon completion, students should be able to demonstrate an understanding of comprehensive emergency management and the integrated emergency management system.

**FIP 240 Fire Service Supervision (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers supervisory skills and practices in the fire protection field. Topics include the supervisor's job, supervision skills, the changing work environment, managing change, organizing for results, discipline and grievances, and loss control. Upon completion, students should be able to demonstrate an understanding of the roles and responsibilities of the effective fire service supervisor.

**FIP 252 Apparatus Spec & Purch (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers the specification and purchase of fire apparatus. Emphasis is placed on NFPA standards for apparatus, recommended types of fire apparatus, purchase and bidding procedures, and the importance of specifications. Upon completion, students should be able to make internal decisions, write specifications, and make recommendations for the purchase of major capital equipment.



**FIP 256 Munic Public Relations (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course is a general survey of municipal public relations and their effect on the governmental process. Topics include principles of public relations, press releases, press conferences, public information officers, image surveys, and the effects of perceived service on fire protection delivery. Upon completion, students should be able to manage the public relations functions of a fire service organization.

**FIP 276 Managing Fire Services (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an overview of fire department operative services. Topics include finance, staffing, equipment, code enforcement, management information, specialized services, legal issues, planning, and other related topics. Upon completion, students should be able to understand concepts and apply fire department management and operations principles.

**French****FRE 111 Elementary French I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the fundamental elements of the French language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French and demonstrate cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**FRE 112 Elementary French II (3-0-0-3)**

Prerequisites: FRE 111

Corequisites: None

This course is a continuation of FRE 111 focusing on the fundamental elements of the French language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate further cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**FRE 141 Culture and Civilization (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course, taught in English, provides an opportunity to explore issues related to the Francophone world. Topics include historical and current events, geography, and customs. Upon completion, students should be able to identify and discuss selected topics and cultural differences related to the Francophone world. This course has been approved to satisfy the Comprehensive Articulation

Agreement for transferability as a premajor and/or elective course requirement.

**FRE 151 Francophone Literature (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: None

This course includes selected readings by Francophone writers. Topics include fictional and non-fictional works by representative authors from a variety of genres and literary periods. Upon completion, students should be able to analyze and discuss selected texts within relevant cultural and historical contexts. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**FRE 161 Cultural Immersion (2-3-0-3)**

Prerequisites: FRE 111

Corequisites: None

This course explores Francophone culture through intensive study on campus and field experience in a host country or area. Topics include an overview of linguistic, historical, geographical, sociopolitical, economic, and/or artistic concerns of the area visited. Upon completion, students should be able to exhibit first-hand knowledge of issues pertinent to the host area and demonstrate an understanding of cultural differences. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**Geology****GEL 111 Introductory Geology (3-2-0-4)**

Prerequisites: RED 090

Corequisites: None

This course introduces basic landforms and geological processes. Topics include rocks minerals, volcanoes, fluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**Geography****GEO 111 World Regional Geography (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the regional concept which emphasizes the spatial association of people and their environment. Emphasis is placed on the physical, cultural, and economic systems that interact to produce the distinct regions of the earth. Upon completion, students should be able to describe variations in physical and cultural features of a region and demonstrate an understanding of their functional relationships. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.



**GEO 112 Cultural Geography (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is designed to explore the diversity of human cultures and to describe their share characteristics. Emphasis is placed on the characteristics, distribution, and complexity of earth's cultural patterns. Upon completion, students should be able to demonstrate an understanding of the differences and similarities in human cultural groups. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

**GEO 131 Physical Geography I (3-2-0-4)**

Prerequisites: RED 090

Corequisites: None

This course introduces the basic physical components that help shape the earth. Emphasis is placed on the geographic grid, cartography, weather, climate, biogeography, and soils. Upon completion, students should be able to identify these components and explain how they interact. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**GEO 132 Physical Geography II (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces the study of minerals, rocks, evolution of landforms, and consequences of landscape change. Emphasis is placed on mineral composition, fluvial processes, erosion and deposition, glaciers, and coastal processes. Upon completion, students should be able to identify these components and processes and to explain how they interact. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**GEO 198 Seminar in Geography (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

**German****GER 111 Elementary German I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the fundamental elements of the German language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written German and demonstrate cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**GER 112 Elementary German II (3-0-0-3)**

Prerequisites: GER 111

Corequisites: None

This course is a continuation of GER 111 focusing on the fundamental elements of the German language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written German and demonstrate further cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**Health****HEA 110 Personal Health/Wellness (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an introduction to basic personal health and wellness. Emphasis is placed on current health issues such as nutrition, mental health, and fitness. Upon completion, students should be able to demonstrate an understanding of the factors necessary to the maintenance of health and wellness. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**HEA 112 First Aid & CPR (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained. This course has been approved for transfer through the Comprehensive Articulation Agreement. Certification in American Red Cross Responding to Emergencies is given at the end of this course.

**History****HIS 111 World Civilizations I (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.

**HIS 112 World Civilizations II (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces world history from the early modern era to the present. Topics include the cul-



tures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.

### **HIS 114 Comparative World History (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides a comparison of western and non-western cultures. Emphasis is placed on historical developments and their impact on the modern world through religion, politics, economics, and social developments. Upon completion, students should be able to compare and contrast western and non-western cultures. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.

### **HIS 116 Current World Problems (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers current world events from an historical perspective. Topics include regional problems as well as international concerns. Upon completion, students should be able to analyze significant current world problems from an historical perspective. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

### **HIS 131 American History I (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

### **HIS 132 American History II (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.

### **HIS 161 Science and Technology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course examines the history of science and technology from pre-history to the present. Topics include the origins, impact, and consequences of scientific and technological developments. Upon completion, students should be able to analyze significant developments in the history of science and technology. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

### **HIS 162 Women and History (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course surveys the experience of women in historical perspective. Topics include the experiences and contributions of women in culture, politics, economics, science, and religion. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural contributions of women in history. This course has been approved for transfer through the Comprehensive Articulation Agreement.

### **HIS 198 Seminar in History (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

### **HIS 211 Ancient History (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course traces the development of the cultural, intellectual, and political foundations of western civilization. Topics include the civilizations of the Near East, the classical Greek and Hellenistic eras, the Roman world, Judaism, and Christianity. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the ancient world. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

### **HIS 212 Medieval History (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course traces the cultural, political, economic, social, religious, and intellectual history of Europe during the Middle Ages. Topics include the decline of the Roman Empire, the Frankish Kingdoms, the medieval church, feudalism, the rise of national monarchies, urbanization, and the rise of universities. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in medieval Europe. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.



**HIS 213 Modern Europe to 1815 (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course traces the cultural, political, economic, social, religious, and intellectual history of Europe from the end of the Middle Ages to 1815. Topics include the Renaissance, the Reformation, religious wars, absolutism, colonialism, the Scientific Revolution, the Enlightenment, the French Revolution, and Napoleon. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early modern Europe. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**HIS 214 Modern Europe Since 1815 (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course traces the history of Europe from 1815 to the present. Topics include the Congress of Vienna, the Revolutionary era, liberalism, socialism, imperialism, nationalism, World Wars I and II, and the Cold War. Upon completion, students should be able to analyze significant intellectual, political, socioeconomic, and cultural developments in modern Europe since 1815. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**HIS 221 African-American History (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers African-American history from the Colonial period to the present. Topics include African origins, the slave trade, the Civil War, Reconstruction, the Jim Crow era, the civil rights movement, and contributions of African Americans. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the history of African Americans. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**HIS 236 North Carolina History (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a study of geographical, political, economic, and social conditions existing in North Carolina from America's discovery to the present. Topics include native and immigrant backgrounds; colonial, antebellum, and Reconstruction periods; party politics; race relations; and the transition from an agrarian to an industrial economy. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in North Carolina. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**Humanities****HUM 101 Values in the Workplace (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course is a study of the influence of human values in the workplace and of the workplace on human values. Emphasis is placed on the ways in which the workplace affects and is affected by human values. Upon completion, students should be able to demonstrate a broad-based awareness and appreciation of the inter-connectedness between human values and the world of work.

**HUM 110 Technology and Society (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**HUM 115 Critical Thinking (3-0-0-3)**

Prerequisites: ENG 101, ENG 111, RED 090

Corequisites: None

This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on information, problem solving, approaching cross-cultural perspectives, and resolving controversies and dilemmas. Upon completion, students should be able to demonstrate orally and in writing the use of critical thinking skills in the analysis of appropriate texts. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirements.

**HUM 150 American Women's Studies (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an inter-disciplinary study of the history, literature, and social roles of American women from Colonial times to the present. Emphasis is placed on women's roles as reflected in American language usage, education, law, the workplace, and mainstream culture. Upon completion, students should be able to identify and analyze the roles of women as reflected in various cultural forms. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/ fine arts.

**HUM 230 Leadership Development (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: None

This course explores the theories and techniques of leadership and group process. Emphasis is placed on leadership styles, theories of group dynamics, and the moral and ethical responsibilities of leadership. Upon completion, students should be able to



identify and analyze a personal philosophy and style of leadership and integrate these concepts in various practical situations.

## **Hydraulics and Pneumatics**

### **HYD 110 Hydraulics/Pneumatics I (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application, and troubleshooting. Oral and written communications skills will be emphasized.

## **International Business**

### **INT 110 International Business (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an overview of the environment, concepts, and basic differences involved in international business. Topics include forms of foreign involvement, international trade theory, governmental influences on trade and strategies, international organizations, multinational corporations, personnel management, and international marketing. Upon completion, students should be able to describe the foundation of international business.

### **INT 115 Global Communications (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces principles and techniques basic to intercultural business communications. Topics include selected cultural values and customs, verbal and nonverbal communication skills, and global etiquette. Upon completion, students should be able to demonstrate beginning skills in effective verbal and nonverbal intercultural communications.

### **INT 210 International Trade (3-0-0-3)**

Prerequisites: INT 110

Corequisites: None

This course covers international business trade practices and foreign market research. Emphasis is placed on current trends of US trade practices in foreign countries and how to engage in international trade and acquire foreign marketing information. Upon completion, students should be able to formulate an overall product policy for the international marketplace.

### **INT 220 International Economics (3-0-0-3)**

Prerequisites: INT 110 and ECO 151 or ECO 251 or ECO 252

Corequisites: None

This course introduces the forces and criteria for the development of a new international economic order. Emphasis is placed on balance of payments, foreign exchange rates and their determination, International Monetary System, and arguments for

and against free trade and protectionism. Upon completion, students should be able to describe economic principles and concepts of international trade. This course is a unique concentration requirement of the International Business concentration in the Business Administration program.

### **INT 230 International Law (3-0-0-3)**

Prerequisites: INT 110 and BUS 115

Corequisites: None

This course is designed to develop an understanding of the different theories on international law and their effect on international trade. Emphasis is placed on concepts of contracts, international transactions, major organizations in international trade, establishment of treaties, economic areas, and US laws affecting international trade. Upon completion, students should be able to apply theories and concepts to international trade and transactions. This course is a unique concentration requirement of the International Business concentration in the Business Administration program.

## **Industrial Maintenance See MNT**

## **Industrial Science**

### **ISC 112 Industrial Safety (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA and environmental regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment. Occupational health and safety topics relating to the modern industrial environment will be covered.

### **ISC 128 Industrial Leadership (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces principles and techniques for managers in modern industry. Topics include leadership traits, management principles and processes, managing conflict, group dynamics, team building, counseling, motivation, and communication. Upon completion, students should be able to understand and apply leadership and management principles in work situations.

### **ISC 132 Mfg Quality Control (2-3-0-3)**

Prerequisites: None

Corequisites: MAT 122

This course introduces quality concepts and techniques used in industry. Topics include elementary statistics and probability, process control, process capability, and quality improvement tools. Upon completion, students should be able to demonstrate an understanding of the concepts and principles of quality and apply them to the work environment.

### **ISC 133 Mfg Management Practices (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers successful industrial organizations and management practices for improving quality and productivity. Topics include self-man-



aged work teams, problem-solving skills, and production management techniques. Upon completion, students should be able to demonstrate an understanding of day-to-day plant operations, team management processes, and the principles of group dynamics.

**ISC 135 Principles of Industrial Mgmt (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the managerial principles and practices required for organizations to succeed in modern industry. Topics include the functions and roles of all levels of management, organization design, and planning and control of manufacturing operations. Upon completion, students should be able to demonstrate an understanding of management principles and integrate these principles into job situations.

**ISC 136 Productivity Analysis I (2-3-0-3)**

Prerequisites: MAT 122

Corequisites: None

This course covers modern methods of improving productivity. Topics include traditional Motion economy, methods analysis, time standards, process analysis, cycle time management, and human factors/ergonomics. Upon completion, students should be able to demonstrate an understanding of productivity concepts and apply productivity improvement techniques to work situations.

**ISC 222 Project Planning/Control (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers how to plan, schedule and control projects typical in manufacturing and service industries. Topics include fundamental project management concepts and hands-on computer application experience with process flow charting and PERT/CPM project managers. Upon completion, students should be able to plan, schedule and control projects using state-of-the-art computer application programs.

**ISC 223 Quantitative Methods (3-0-0-3)**

Prerequisites: MAT 122

Corequisites: None

This course introduces the quantitative methods involved in operations management decision making. Topics include linear programming, forecasting techniques, inventory control, project management, decision analysis, and simulation modeling. Upon completion, students should be able to interpret quantitative results and demonstrate appropriate decision-making skills. Oral and written communications skills will be emphasized.

**ISC 230 Simulation Prod Processes (1-3-0-2)**

Prerequisites: MAT 122

Corequisites: None

This course introduces fundamental principles and procedures for simulation modeling of production processes. Emphasis is placed on problem-solving and engineering applications of simulation modeling for quality enhancement and productivity improvement. Upon completion, students should be able to analyze and model a production process

to obtain optimum productive operations. Oral and written communications skills will be emphasized.

**ISC 233 Industrial Org & Mgmt (3-0-0-3)**

Prerequisites: ISC 133 or ISC 128

Corequisites: None

This course covers advanced organization and management philosophies for organization improvement. Emphasis is placed on understanding comprehensive organization improvement concepts such as reengineering, MBQA, ISO 9000, and teams. Upon completion, students should be able to demonstrate an understanding of organizations and assess their strengths and weaknesses. Oral and written communications skills will be emphasized.

**ISC 235 Management Problems (3-0-0-3)**

Prerequisites: ISC 135

Corequisites: None

This course covers problem-solving strategies for a variety of industrial management problems. Emphasis is placed on integrating management principles and practices in an industrial setting through a case-study approach. Upon completion, students should be able to analyze a variety of management problems and provide oral and/or written reports which include problem definition and recommendations. Oral and written communications skills will be emphasized.

**ISC 236 Productivity Analysis II (2-3-0-3)**

Prerequisites: MAT 122 and ISC 136

Corequisites: None

This course covers advanced process and system productivity improvement concepts. Topics include work measurement techniques, resource measurement and planning, team improvement concepts, and team productivity measurements. Upon completion, students should be able to demonstrate an understanding of advanced productivity concepts and apply advanced productivity improvement techniques to work situations.

**ISC 237 Quality Management (2-3-0-3)**

Prerequisites: ISC 132

Corequisites: None

This course covers the process by which successful manufacturing organizations achieve customer satisfaction in all processes in the organization. Topics include quality models and approaches, such as MBNQA, ISO 9000, benchmarking, and Deming's 14 Points, and the incorporation of SPC improvement techniques. Upon completion, students should be able to integrate SPC techniques with successful management practices for a comprehensive understanding of continuous quality improvement. Oral and written communications skills will be emphasized.

**ISC 243 Prod & Oper Management I (2-3-0-3)**

Prerequisites: ISC 128 and MAT 122

Corequisites: None

This course introduces production and operations management concepts, including the use of computer programs to analyze and solve manufacturing problems. Topics include operations strategy, forecasting, production planning and scheduling,



inventory management, MRP, Just-in Time production, and resource management. Upon completion, students should be able to recognize, analyze, and solve a variety of production and operations problems.

### **ISC 244 Prod & Oper Management II (2-3-0-3)**

Prerequisites: ISC 243

Corequisites: None

This course covers advanced production and operations management concepts, including the use of computer programs to analyze/solve manufacturing problems. Topics include systems analysis, resource allocation, cost control, and productivity improvement using advanced tools such as linear programming, ABC costing, manufacturing modeling, and manufacturing simulation. Upon completion, students should be able to recognize, analyze, and solve a variety of complex production and operations problems.

### **ISC 255 Engineering Economy (2-2-0-3)**

Prerequisites: MAT 121

Corequisites: None

This course covers the process of economic evaluation of manufacturing industrial alternatives such as equipment selection, replacement studies, and cost reduction proposals. Topics include discounted cash flows, time value of money, income tax considerations, internal rates of return, and comparison of alternatives using computer programs. Upon completion, students should be able to analyze complex manufacturing alternatives based on engineering economy principles.

### **ISC 256 System Design (2-3-0-3)**

Prerequisites: ISC 230

Corequisites: ISC 236

This course incorporates all phases of industrial engineering into the comprehensive design of an industrial system. Emphasis is placed on developing project reports which reflect a comprehensive understanding of industrial engineering and the analytical tools used to plan work systems. Upon completion, students should be able to demonstrate a comprehensive knowledge of industrial engineering through this capstone course. Oral and written communications skills will be emphasized.

## **Internet Technologies**

### **ITN 140 Web Development Tools (2-2-0-3)**

Prerequisites:None

Corequisites:None

This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites and supporting applets.

### **ITN 160 Principles of Web Design (2-2-0-3)**

Prerequisites:None

Corequisites:None

The course introduces intermediate to advanced web page design techniques. Topics include effective use of graphics, fonts, colors, navigation tools, advanced markup language elements, as well as a study of bad design techniques. Upon completion, students should be able to employ advanced design

techniques to create high impact and highly functional web pages.

## **Jewelry Design - See Art**

## **Legal Education**

### **LEX 110 Intro to Paralegal Study (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the paralegal profession and the legal system. Topics include regulations and concepts, ethics, case analysis, legal reasoning, career opportunities, certification, professional organizations, and other related topics. Upon completion, students should be able to explain the role of the paralegal and identify the skills, knowledge, and ethics required of legal assistants.

### **LEX 120 Legal Research/Writing I (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the techniques of legal research and writing. Emphasis is placed on locating, analyzing, applying, and updating sources of law; effective legal writing, including proper citation; and the use of electronic research methods. Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course.

### **LEX 121 Legal Research/Writing II (2-2-0-3)**

Prerequisites: LEX 120

Corequisites: None

This course covers advanced topics in legal research and writing. Topics include more complex legal issues and assignments involving preparation of legal memos, briefs, and other documents and the advanced use of electronic research methods. Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course.

### **LEX 130 Civil Injuries (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers traditional tort concepts and the evolving body of individual rights created by statute. Topics include intentional and non intentional torts with emphasis on negligence, strict liability, civil rights, workplace and environmental liability, remedies, and damages. Upon completion, students should be able to recognize, explain, and evaluate elements of civil injuries and related defenses.

### **LEX 140 Civil Litigation I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the structure of the legal system and the rules governing civil litigation. Topics include jurisdiction, state and federal rules of civil procedure and evidence. Upon completion, students should be able to assist an attorney in the preparation of pleadings and motions.



**LEX 141 Civil Litigation II (2-2-0-3)**

Prerequisites: LEX 140

Corequisites: None

This course covers advanced topics in the civil litigation process. Topics include motions, discovery, and trial and appellate procedures. Upon completion, students should be able to assist an attorney in preparing and organizing documents for trial, settlement and post-trial practice.

**LEX 150 Commercial Law I (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course covers legally enforceable agreements, forms of organization, and selected portions of the Uniform Commercial Code. Topics include drafting and enforcement of contracts, leases, and related documents and selection and implementation of business organization forms, sales, and commercial papers. Upon completion, students should be able to apply the elements of a contract, prepare various business documents, and understand the role of commercial paper.

**LEX 160 Criminal Law & Procedure (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces substantive criminal law and procedural rights of the accused. Topics include elements of state/federal crimes, defenses, constitutional issues, pre-trial and trial process, and other related topics. Upon completion, students should be able to explain elements of specific crimes and assist an attorney in preparing a criminal case.

**LEX 170 Administrative Law (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers the scope, authority, and regulatory operations of various federal, state, and local administrative agencies. Topics include social security, worker's compensation, unemployment, zoning, and other related topics. Upon completion, students should be able to research sources of administrative law, investigate, and assist in representation of clients before administrative agencies.

**LEX 198 Seminar in Legal Education (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

**LEX 210 Real Property I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the study of real property law. Topics include the distinction between real and personal property, various estates, mechanics of conveyance and encumbrance, recordation, special proceedings, and other related topics. Upon completion, students should be able to identify estates, forms of deeds, requirements for recording, and procedures to enforce rights to real property.

**LEX 211 Real Property II (1-4-0-3)**

Prerequisites: LEX 210

Corequisites: None

This course continues the study of real property law relating to title examination and preparation of closing documents. Topics include use of courthouse and other public records in title examination and preparation of documents required in real estate transactions and closings. Upon completion, students should be able to plot/draft a description, perform complete title examination, draft closing documents including title insurance forms, and prepare disbursement reconciliation.

**LEX 220 Corporate Law (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers the legal aspects of forming, operating, and maintaining a business. Emphasis is placed on the business corporation with additional coverage of sole proprietorships and partnerships. Upon completion, students should be able to draft basic partnership and corporate documents and file these documents as required.

**LEX 240 Family Law (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers laws governing domestic relations. Topics include marriage, separation, divorce, child custody, support, property division, adoption, domestic violence, and other related topics. Upon completion, students should be able to interview clients, gather information, and draft documents related to family law.

**LEX 250 Wills, Estates, & Trusts (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course covers various types of wills, trusts, probate, estate administration, and intestacy. Topics include types of wills and execution requirements, caveats and dissents, intestate succession, inventories and accountings, distribution and settlement, and other related topics. Upon completion, students should be able to draft simple wills, prepare estate forms, understand administration of estates including taxation, and explain terms regarding trusts.

**LEX 260 Bankruptcy & Collections (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course provides an overview of the laws of bankruptcy and the rights of creditors and debtors. Topics include bankruptcy procedures and estate management, attachment, claim and delivery, repossession, foreclosure, collection, garnishment, and post-judgment collection procedure. Upon completion, students should be able to prepare and file bankruptcy forms, collection letters, statutory liens, and collection of judgments.

**LEX 270 Law Office Mgt/Technology (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course provides an overview of law office management and organization. Topics include office forms, filing systems, billing/time keeping, computer systems, calendar systems, library



administration, case management, office/personnel procedures, ethics, and technology. Upon completion, students should be able to set up and maintain various law office systems, monitor case progress, and supervise non-lawyer personnel.

### **LEX 280 Ethics & Professionalism (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course reinforces legal ethics and the role of the paralegal in a professional work environment. Topics include a review of ethics, employment opportunities, and search techniques; paralegal certification; and other related topics. Upon completion, students should be able to understand the role of a professional paralegal and identify authority that can properly be delegated by an attorney.

## **Logistics Management**

### **LOG 110 Introduction to Logistics (3-0-0-3)**

Prerequisites: None

Corequisites: None

The course provides an overview of logistics. Topics include traffic management, warehousing, inventory control, material handling, global logistics, and the movement and storage of goods from raw materials sources to end consumers. Upon completion, students should be able to identify the different segments of logistics and use the terminology of the industry.

### **LOG 120 Global Logistics (3-0-0-3)**

Prerequisites: LOG 110

Corequisites: None

This course examines logistics operations, processes, and modes of transportation in an interdependent world economy. Emphasis is placed on freight forwarding operations, analyzing and selecting transportation modes, and processing of import/export documentation. Upon completion students should be able to arrange and coordinate the transportation of products globally. This course is a unique concentration requirement of the Logistics Management concentration in the Business Administration program.

### **LOG 210 Fleet Management (3-0-0-3)**

Prerequisites: LOG 110

Corequisites: None

This course covers the management of transportation, fleet operations, and safety. Emphasis is placed on DOT safety regulations in the hiring, training, and supervision of drivers in transportation. Upon completion, students should be able to write a safety program for drivers involved in interstate commerce following DOT regulations.

### **LOG 220 Logistics Management (3-0-0-3)**

Prerequisites: LOG 110

Corequisites: None

This course covers the management of the movement and storage of goods and analysis of total costs involved. Emphasis is placed on the monitoring of inventory using automated systems, managing the storage function, warehousing, and distribution. Upon completion, students should be able to describe warehousing and facility layouts, identify material handling methods, and apply invento-

ry control procedures. This course is a unique concentration requirement of the Logistics Management concentration in the Business Administration program.

### **LOG 230 Transportation Management (3-0-0-3)**

Prerequisites: LOG 110

Corequisites: None

This course covers the function of shippers and carriers in the transportation industry. Emphasis is placed on negotiating price and service requirements in the movement of goods, identifying areas of carrier liability, and the methods for processing claims. Upon completion, students should be able to compare common carriers and company operated transportation for service and cost, interpret pricing structures, and determine carrier liability. This course is a unique concentration requirement of the Logistics Management concentration in the Business Administration program.

## **Machine Technology**

### **MAC 111 Machining Technology I (2-12-0-6)**

Prerequisites: None

Corequisites: None

This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform the basic operations of measuring, layout, drilling, sawing, turning, and milling.

### **MAC 112 Machining Technology II (2-12-0-6)**

Prerequisites: MAC 111

Corequisites: None

This course provides additional instruction and practice in the use of precision measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection and use of work holding devices, speeds, feeds, cutting tools, and coolants. Upon completion, students should be able to perform basic procedures on precision grinders and advanced operations of measuring, layout, drilling, sawing, turning, and milling.

### **MAC 113 Machining Technology III (2-12-0-6)**

Prerequisites: MAC 112

Corequisites: None

This course provides an introduction to advanced and special machining operations. Emphasis is placed on working to specified tolerances with special and advanced setups. Upon completion, students should be able to produce a part to specifications.

### **MAC 114 Intro to Metrology (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the care and use of precision measuring instruments. Emphasis is placed on the inspection of machine parts and use of a wide variety of measuring instruments. Upon completion, students should be able to demonstrate the correct use of measuring instruments.



**MAC 121 Intro to CNC (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the concepts and capabilities of computer numerical control machine tools. Topics include setup, operation, and basic applications. Upon completion, students should be able to explain operator safety, machine protection, data input, program preparation, and program storage.

**MAC 122 CNC Turning (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers. The primary focus will be on the Fanuc series 0 control and supporting G-codes.

**MAC 124 CNC Milling (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the manual programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC machining centers.

**MAC 222 Advanced CNC Turning (1-3-0-2)**

Prerequisites: MAC 122

Corequisites: None

This course covers advanced methods in setup and operation of CNC turning centers. Emphasis is placed on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC turning centers. The primary focus will be on the Mazatrol programming format and control.

**MAC 232 CNC Graphics Prog: Milling (1-4-0-3)**

Prerequisites: MAC 124

Corequisites: None

This course introduces Computer Numerical Control graphics programming and concepts for machining center applications. Emphasis is placed on developing a shape file in a graphics CAM system and transferring coded information from CAM graphics to the CNC milling center. Upon completion, students should be able to develop a complete job plan using CAM software to create a multi-axis CNC program.

**MAC 243 Die Making I (2-6-0-4)**

Prerequisites: MAC 112 Corequisites: None This course introduces the principles and applications of die making. Topics include types, construction, and application of dies. Upon completion, students should be able to design and build simple dies.

**MAC 245 Mold Construction I (2-6-0-4)**

Prerequisites: MAC 112

Corequisites: None

This course introduces the principles of mold making. Topics include types, construction, and appli-

cation of molds. Upon completion, students should be able to design and build simple molds.

**Math****MAT 060 Essential Mathematics (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course is a comprehensive study of mathematical skills which should provide a strong mathematical foundation to pursue further study. Topics include principles and applications of decimals, fractions, percents, ratio and proportion, order of operations, geometry, measurement, and elements of algebra and statistics. Upon completion, students should be able to perform basic computations and solve relevant, multi-step mathematical problems using technology where appropriate.

**MAT 070 Introductory Algebra (3-2-0-4)**

Prerequisites: MAT 060

or appropriate ASSET score

Corequisites: RED 080

or appropriate ASSET score

This course establishes a foundation in algebraic concepts and problem solving. Topics include signed numbers, exponents, order of operations, simplifying expressions, solving linear equations and inequalities, graphing, formulas, polynomials, factoring, and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology.

**MAT 080 Intermediate Algebra (3-2-0-4)**

Prerequisites: MAT 070

or appropriate ASSET score

Corequisites: RED 080

or appropriate ASSET score

This course continues the study of algebraic concepts with emphasis on applications. Topics include factoring; rational expressions; rational exponents; rational, radical, and quadratic equations; systems of equations; inequalities; graphing; functions; variations; complex numbers; and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology.

**MAT 101 Applied Mathematics I (2-2-0-3)**

Prerequisites: MAT 060

Corequisites: None

This course is a comprehensive review of arithmetic with basic algebra designed to meet the needs of certificate and diploma programs. Topics include arithmetic and geometric skills used in measurement, ratio and proportion, exponents and roots, applications of percent, linear equations, formulas, and statistics. Upon completion, students should be able to solve practical problems in their specific areas of study.

**MAT 110 Mathematical Measurement (2-2-0-3)**

Prerequisites: MAT 070

Corequisites: None

This course provides an activity-based approach to utilizing, interpreting, and communicating data in a variety of measurement systems. Topics include accuracy, precision, conversion, and estimation



within metric, apothecary, and avoirdupois systems; ratio and proportion; measures of central tendency and dispersion; and charting of data. Upon completion, students should be able to apply proper techniques to gathering, recording, manipulating, analyzing, and communicating data.

### **MAT 115 Mathematical Models (2-2-0-3)**

Prerequisites: MAT 070

Corequisites: None

This course develops the ability to utilize mathematical skills and technology to solve problems at a level found in non-mathematics intensive programs. Topics include applications to percent, ratio and proportion, formulas, statistics, functional notation, linear functions and their groups, probability, sampling techniques, scatter plots, and modeling. Upon completion, students should be able to solve practical problems, reason and communicate with mathematics, and work confidently, collaboratively, and independently.

### **MAT 120 Geometry and Trigonometry (2-2-0-3)**

Prerequisites: MAT 070

Corequisites: None

This course introduces the concepts of plane trigonometry and geometry with emphasis on applications to problem solving. Topics include the basic definitions and properties of plane and solid geometry, area and volume, right triangle trigonometry, and oblique triangles. Upon completion, students should be able to solve applied problems both independently and collaboratively using technology.

### **MAT 121 Algebra/Trigonometry I (2-2-0-3)**

Prerequisites: MAT 070

Corequisites: None

This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include simplification, evaluation, and solving of algebraic and radical functions; complex numbers; right triangle trigonometry; systems of equations; and the use of technology. Upon completion, students should be able to demonstrate an understanding of the use of mathematics and technology to solve problems and analyze and communicate results.

### **MAT 122 Algebra/Trigonometry II (2-2-0-3)**

Prerequisites: MAT 121

Corequisites: None

This course extends the concepts covered in MAT 121 to include additional topics in algebra, function analysis, and trigonometry. Topics include exponential and logarithmic functions, translation and scaling of functions, Sine Law, Cosine Law, vectors and statistics. Upon completion, students should be able to demonstrate an understanding of the use of technology to solve problems and to analyze and communicate results.

### **MAT 140 Survey of Mathematics (3-0-0-3)**

Prerequisites: MAT 070

Corequisites: None

This course provides an introduction in a non-technical setting to selected topics in mathematics. Topics may include, but are not limited to, sets, logic, probability, statistics, matrices, mathematical systems, geometry, topology, mathematics of

finance, and modeling. Upon completion, students should be able to understand a variety of mathematical applications, think logically, and be able to work collaboratively and independently. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

### **MAT 151 Statistics I(3-0-0-3)**

Prerequisites: MAT 080, RED 090

Corequisites: MAT 151A

This course provides a project-based approach to the study of basic probability, descriptive and inferential statistics, and decision making. Emphasis is placed on measures of central tendency and dispersion, correlation, regression, discrete and continuous probability distributions, quality control, population parameter estimation, and hypothesis testing. Upon completion, students should be able to describe important characteristics of a set of data and draw inferences about a population from sample data. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

### **MAT 15 IA Statistics I Lab (0-2-0-1)**

Prerequisites: MAT 080

Corequisites: MAT 151

This course is a laboratory for MAT 15 1. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively.

### **MAT 161 College Algebra (3-0-0-3)**

Prerequisites: MAT 080

Corequisites: MAT 161A

This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on applications involving equations and inequalities; polynomial, rational, exponential and logarithmic functions; and graphing and data analysis/modeling. Upon completion, students should be able to choose an appropriate model to fit a data set and use the model for analysis and prediction. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/ mathematics.

### **MAT 161A College Algebra Lab (0-2-0-1)**

Prerequisites: MAT 080

Corequisites: MAT 161

This course is a laboratory for MAT 161. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively.

### **MAT 175 Precalculus (4-0-0-4)**

Prerequisites: MAT 161 and MAT 161A, or departmental approval

Corequisites: MAT 175A

This course provides an intense study of the topics which are fundamental to the study of calculus. Emphasis is placed on functions and their graphs



with special attention to polynomial, rational, exponential, logarithmic and trigonometric functions, and analytic trigonometry. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and prediction. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Graphing calculators will be used to investigate the above topics as well as other topics.

#### **MAT 175A Precalculus Lab (0-2-0-1)**

Prerequisites: None

Corequisites: MAT 175

This course is a laboratory for MAT 175. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively.

#### **MAT 223 Applied Calculus (2-2-0-3)**

Prerequisites: MAT 122

Corequisites: None

This course provides an introduction to the calculus concepts of differentiation and integration by way of application and is designed for engineering technology students. Topics include limits, slope, derivatives, related rates, areas, integrals, and applications. Upon completion, students should be able to demonstrate an understanding of the use of calculus and technology to solve problems and to analyze and communicate results.

#### **MAT 252 Statistics II (3-0-0-3)**

Prerequisites: MAT 151 and either MAT 121 or MAT 161

Corequisites: MAT 252A

This course provides a technology-based treatment of multiple sample inferential statistics. Emphasis is placed on two sample hypothesis tests and confidence intervals, linear and multiple regression, analysis of variance, experimental design, and non-parametric techniques. Upon completion, students should be able to draw statistical inferences on multiple sample data taken from business and health, social, natural, and applied sciences. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

#### **MAT 252A Statistics II Lab (0-2-0-1)**

Prerequisites: MAT 151, MAT 121, MAT 161

Corequisites: MAT 252

This course is a laboratory for MAT 252. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

#### **MAT 263 Brief Calculus (3-0-0-3)**

Prerequisites: MAT 161

Corequisites: MAT 263A

This course introduces concepts of differentiation and integration and their applications to solving problems; the course is designed for students needing one semester of calculus. Topics include functions, graphing, differentiation, and integration with emphasis on applications drawn from business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Graphing calculators will be used to investigate applications involving the above topics.

#### **MAT 263A Brief Calculus Lab (0-2-0-1)**

Prerequisites: MAT 161

Corequisites: MAT 263

This course is a laboratory for MAT 263. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

#### **MAT 271 Calculus I (3-2-0-4)**

Prerequisites: MAT 175

Corequisites: None

This course covers in depth the differential calculus portion of a three-course calculus sequence. Topics include limits, continuity, derivatives, and integrals of algebraic and transcendental functions of one variable, with applications. Upon completion, students should be able to apply differentiation and integration techniques to algebraic and transcendental functions. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Graphing calculators will be used to investigate applications involving the above topics.

#### **MAT 272 Calculus II (3-2-0-4)**

Prerequisites: MAT 271

Corequisites: None

This course provides a rigorous treatment of integration and is the second calculus course in a three-course sequence. Topics include applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to use integration and approximation techniques to solve application problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Graphing calculators will be used to investigate applications involving the above topics.



**MAT 273 Calculus III (3-2-0-4)**

Prerequisites: MAT 272

Corequisites: None

This course covers the calculus of several variables and is third calculus course in a three-course sequence. Topics include functions of several variables, partial derivatives, multiple integrals, solid analytical geometry, vector-valued functions, and line and surface integrals. Upon completion, students should be able to solve problems involving vectors and functions of several variables. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. Graphing calculators will be used to investigate applications involving the above topics.

**MAT 280 Linear Algebra (3-0-0-3)**

Prerequisites: MAT 271

Corequisites: None

This course provides a study of linear algebra topics with emphasis on the development of both abstract concepts and applications. Topics include vectors, systems of equations, matrices, determinants, vector spaces, linear transformations in two or three dimensions, eigenvectors, eigenvalues, diagonalization and orthogonality. Upon completion, students should be able to demonstrate both an understanding of the theoretical concepts and appropriate use of linear algebra models to solve application problems. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**MAT 285 Differential Equations (3-0-0-3)**

Prerequisites: MAT 272

Corequisites: None

This course provides an introduction to ordinary differential equations with an emphasis on applications. Topics include first-order, linear higher-order, and systems of differential equations; numerical methods; series solutions; eigenvalues and eigenvectors; Laplace transforms; and Fourier series. Upon completion, students should be able to use differential equations to model physical phenomena, solve the equations, and use the solutions to analyze the phenomena. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**Mechanical Technology****MEC 111 Machine Processes I (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course introduces safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include safety, measuring tools, and the basic setup and operation of lathes, milling machines, drill presses, and saws. Upon completion, students should be able to manufacture a simple part to a specified tolerance. Other topics to be covered include non-destructive inspection and testing, work holding devices, and machining centers.

**MEC 112 Machine Processes II (2-3-0-3)**

Prerequisites: MEC 111

Corequisites: None

This course covers advanced use of milling machines and lathes. Emphasis is placed on safety and compound setup of milling machines and lathes for manufacture of projects with a specified fit. Upon completion, students should be able to demonstrate proper procedures for manufacture of assembled parts.

**MEC 145 Mfg Materials I (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course introduces a variety of manufacturing materials and common processing techniques. Emphasis is placed on the processing, testing, and application of materials such as wood, metals, plastics, ceramics, and composites. Upon completion, students should be able to demonstrate an understanding of fundamental engineering applications for a variety of materials, including their process capabilities and limitations.

**MEC 161 Manufacturing Processes I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides the fundamental principles of processing materials into usable forms for the customer. Emphasis is placed on material forming, removal, and value-added processing provided to the customer by the manufacturers. Upon completion, students should be able to apply principles of traditional and non-traditional processing for metals and non-metals.

**MEC 180 Engineering Materials (2-3-0-3)**

Prerequisites: MEC 145

Corequisites: None

This course covers the physical and mechanical properties of materials. Topics include testing, heat treating, ferrous and non-ferrous metals, plastics, composites, and material selection. Upon completion, students should be able to specify basic tests and properties and select appropriate materials on the basis of specific properties. Further topics include iron-carbon phase diagrams, ITT diagrams, and processes concerning metallurgical transformation; oral and written communications skills will be emphasized.

**MEC 210 Materials-Stress Analysis (1-2-0-2)**

Prerequisites: MAT 121

Corequisites: None

This course is a study of the principles and analysis of stress within machines and structural elements. Emphasis is placed on various types of loads including static, impact, varying, and dynamic loads. Upon completion, students should be able to demonstrate proficiency in analyzing stress in mechanical joints, welds, beams, and columns.

**MEC 245 Mfg Materials II (2-3-0-3)**

Prerequisites: MEC 145

Corequisites: None

This course covers advanced materials and processing techniques used in modern manufacturing.



Emphasis is placed on processing, testing, and application of materials such as polymers, ceramics, and coatings and nontraditional manufacturing processes. Upon completion, students should be able to demonstrate a comprehensive understanding of modern manufacturing processes, engineering materials, and production systems.

**MEC 250 Statics & Strength of Mat (4-3-0-5)**

Prerequisites: PHY 131 or PHY 151

Corequisites: None

This course covers the concepts and principles of statics and stress analysis. Topics include systems of forces on structures in equilibrium and analysis of stresses and strains on these components. Upon completion, students should be able to analyze forces and the results of stresses and strains on structural components.

**MEC 265 Fluid Mechanics (2-2-0-3)**

Prerequisites: PHY 131

Corequisites: None

This course covers the physical behavior of fluids and fluid systems. Topics include fluid statics and dynamics, laminar and turbulent flow, Bernoulli's Equation, components, applications, and other related topics. Upon completion, students should be able to apply fluid power principles to practical applications.

**MEC 267 Thermal Systems (2-2-0-3)**

Prerequisites: PHY 131 or PHY 151

Corequisites: None

This course introduces the fundamental laws of thermodynamics. Topics include work and energy, open and closed systems, and heat engines. Upon completion, students should be able to demonstrate a knowledge of the laws and principles that apply to thermal power. Additional topics covered are properties of steam, use of steam tables, specific heat and entropy changes of ideal gases, and vapor power cycles in Camot, Otto, and Rankine.

**MEC 270 Machine Design (3-3-0-4)**

Prerequisites: DFT 151, MEC 180  
and MEC 250

Corequisites: None

This course covers the basic principles underlying design and selection of machine elements. Topics include stress analysis, selection of components, power transmission, and other design considerations. Upon completion, students should be able to identify and solve mechanical design problems by applying basic engineering principles. Other topics are design and application of machine components such as shafts, belt drives, bearings, chain drives, clutches, couplings, and gears.

**MEC 275 Engineering Mechanisms (2-2-0-3)**

Prerequisites: DFT 151 and PHY 131  
or PHY 151

Corequisites: None

This course covers plane motion and devices used to generate plane motion. Topics include analysis of displacement, velocity, acceleration, gears, cams, and other mechanical systems. Upon completion, students should be able to graphically and

mathematically analyze a plane motion system. Other topics include analysis of velocity and acceleration of linkages using relative velocity and instant center methods; use of software to analyze mechanisms.

**MEC 281 Electronic Mfg Processes (3-3-0-4)**

Prerequisites: MEC 161 or MEC 145

Corequisites: None

This course introduces electronic manufacturing processes. Topics include PCB manufacturing, artwork, clean room processing, environmental concerns, reliability, soldering, material issues, flexible circuits, connections, and electronic assembly. Upon completion, students should be able to demonstrate an understanding of basic electronic processing and be able to process simple electronic devices. Oral and written communications skills will be emphasized.

**MEC 283 Introduction to CAM (2-3-0-3)**

Prerequisites: MEC 112 and DFT 111

Corequisites: None

This course introduces the major concepts of a computer-aided manufacturing system. Topics including linking CAD to CAM, software, programming, and machine codes. Upon completion, students should be able to write a program to a simple part using a CAD input file. Oral and written communications skills will be emphasized.

**Medical Assisting**

**MED 110 Orientation to Medical Assisting (1-0-0-0-1)**

Prerequisites: None

Corequisites: None

This course covers the history of medicine and the role of the medical assistant in the health care setting. Emphasis is placed on professionalism, communication, attitude, behaviors, and duties in the medical environment. Upon completion, students should be able to project a positive attitude and promote the profession of medical assisting.

**MED 118 Medical Law and Ethics (2-0-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers legal relationships of physicians and patients, contractual agreements, professional liability, malpractice, medical practice acts, informed consent, and bioethical issues. Emphasis is placed on legal terms, professional attitudes, and the principles and the basic concepts of ethics and laws involved in providing medical services. Upon completion, students should be able to meet the legal and ethical responsibilities of a multi-skilled health professional. Guest speakers may be utilized to discuss current medicolegal topics and role-play sessions may be used to reenact various medical court cases.

**MED 121 Medical Terminology I (3-0-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces prefixes, suffixes, and word roots. Topics include medical vocabulary and the



terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

### **MED 122 Medical Terminology II (3-0-0-0-3)**

Prerequisites: MED 121

Corequisites: None

This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders.

### **MED 130 Administrative Office Procedures I (1-2-0-0-2)**

Prerequisites: Enrollment in the Medical Assisting Program, OST 131, MED 121

Corequisites: None

This course provides an introduction to all medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment. Students will participate in office simulation projects, throughout the course, which are designed to reinforce applications skills.

### **MED 131 Administrative Office Procedures II (1-2-0-0-2)**

Prerequisites: MED 130

Corequisites: None

This course is the second in a series and provides medical office procedures in both economic and management skills. Topics include physical plant maintenance, equipment and supplies, liability coverage, medical economics, and introductory insurance procedures. Upon completion, students should be able to manage the economics of the medical office and supervise personnel. Students will participate in office simulation projects, throughout the course, which are designed to reinforce applications skills.

### **MED 134 Medical Transcription (2-2-0-0-3)**

Prerequisites: MED 121, OST 131

Corequisites: None

This course provides the basic knowledge, understanding, and skills required to complete medical reports, and transcribe medical dictation. Emphasis is placed on correct punctuation, capitalization, and spelling. Upon completion, students should be able to demonstrate competency in medical transcription. Additionally, students will demonstrate competency in transcribing generic and proprietary drug names as well as competency in computer application skills necessary for successful medical transcription.

### **MED 140 Exam Room Procedures I (3-4-0-0-5)**

Prerequisites: Enrollment in the Medical Assisting Program

Corequisites: None

This course provides instruction in clinical examining room procedures. Topics include aspects, infection control, assisting with exams and treatment, patient education, preparation and administration of medications, EKG's, vital signs, and medical emergencies. Upon completion, students should be able to perform competency based course topics. Students will demonstrate math competencies in algebraic computations necessary to successfully calculate drug dosages and determine equivalent doses among the household apothecary, and metric systems.

### **MED 150 Laboratory Procedures I (3-4-0-0-5)**

Prerequisites: Enrollment in the Medical Assisting Program

Corequisites: None

This course is designed to provide instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collection and processing specimens, performing selective tests, phlebotomy, screening and follow-up of test results, and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics. Students will demonstrate proficiency in the use of medical office laboratory equipment necessary to perform basic laboratory tests.

### **MED 230 Administrative Office Procedures III (1-2-0-0-2)**

Prerequisites: MED 131

Corequisites: None

This course provides advanced medical office administrative procedures. Emphasis is placed on management skills including personnel supervision, practice management, public relations, and insurance coding. Upon completion, students should be able to exhibit advanced managerial medical assisting skills. Additional studies will be devoted to hands-on practice sessions in insurance coding and development of assigned sections of an office procedure manual.

### **MED 240 Exam Room Procedures II (3-4-0-0-5)**

Prerequisites: MED 140

Corequisites: None

This course is designed to expand and build upon skills presented in MED 140. Emphasis is placed on advanced exam room procedures. Upon completion, students should be able to demonstrate enhanced competency in selected exam room procedures. Additional studies will concentrate on basic principles of diet therapy.

### **MED 250 Laboratory Procedures II (3-4-0-0-5)**

Prerequisites: MED 150

Corequisites: None

This course is designed to expand and build on skills presented in MED 150. Emphasis is placed on increasing proficiency in laboratory skills used in the medical setting. Upon completion, students



should be able to demonstrate enhanced competency in selected medical laboratory procedures. Additional studies will concentrate on first aid and cardiopulmonary resuscitation (CPR).

**MED 260 Clinical Externship (0-0-15-0-5)**

Prerequisites: MED 118, MED 230, MED 240, MED 250, MED 272

Corequisites: MED 262, MED 264

This course provides the opportunity to apply clinical, laboratory, and administrative skills in a medical facility. Emphasis is placed on enhancing competency in clinical and administrative skills necessary for comprehensive patient care, and, strengthening professional and communication interactions. Upon completion, students should be able to function as an entry-level health care professional. The clinical externship rotation will be condensed into an 8 week session, with medical facility staff supervising students assigned to their facility for 30 hours per week.

**MED 262 Clinical Perspectives (1-0-0-0-1)**

Prerequisites: Enrollment in the Medical Assisting Program

Corequisites: MED 260, MED 264

This course is designed to explore personal and occupational responsibilities of the practicing medical assistant. Emphasis is placed on problems encountered during externships and development of problem solving skills. Upon completion, students should be able to act in a courteous and diplomatic manner when solving problems in the medical facility. Students will continue the development of assigned sections of a medical office procedure manual.

**MED 264 Medical Assisting Overview (2-0-0-0-2)**

Prerequisites: Enrollment in the Medical Assisting Program

Corequisites: MED 260, MED 262

This course provides an overview of the complete medical assisting curriculum. Emphasis is placed on all facets of medical assisting pertinent to administrative, laboratory, and clinical procedures performed in the medical environment. Upon completion, students should be prepared for the national certification examination for medical assistants. Students will participate in practice test sessions throughout the course that will culminate in a mock certification examination at the end of the course.

**MED 270 Symptomatology (2-2-0-0-3)**

Prerequisites: Enrollment in the Medical Assisting Program

Corequisites: None

This course covers the study of disease symptoms and the appropriate actions taken by medical assistants in a medical facility in relation to these symptoms. Emphasis is placed on interviewing skills and appropriate triage, preparing patients for procedures, and screening the test results. Upon completion, students should be able to recognize how certain symptoms relate to specific diseases, recognize emergency situations, and take appropriate actions. Students will participate in class projects designed to meet the competencies of the course.

**MED 272 Drug Therapy (3-0-0-0-3)**

Prerequisites: Enrollment in the Medical Assisting Program, MED 140, MED 270

Corequisites: None

This course focuses on major drug groups, including their side effects, interactions, methods of administration, and proper documentation. Emphasis is placed on the theory of drug administration. Upon completion, students should be able to identify, spell, recognize side effects of and document the most commonly used medications in the physician's office. Students will research the 50 most commonly prescribed drugs according to guidelines set forth in the course.

**Marketing and Retailing**

**MKT 120 Principles of Marketing (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

**MKT 220 Advertising and Sales Promotion (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application.

**MKT 223 Customer Service (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course stresses the importance of customer relations in the business world. Emphasis is placed on learning how to respond to complex customer requirements and to efficiently handle stressful situations. Upon completion, students should be able to demonstrate the ability to handle customer relations.

**MKT 224 International Marketing (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the basic concepts of international marketing activity and theory. Topics include product promotion, placement, and pricing strategies in the international marketing environment. Upon completion, students should be able to demonstrate a basic understanding of the concepts covered.



## **Industrial Maintenance Technology**

### **MNT 110 Intro to Maint Procedures (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.

### **MNT 111 Maintenance Practices (1-3-0-2)**

Prerequisites: MNT 110

Corequisites: None

This course provides in-depth theory and practical applications relating to predictive and preventive maintenance programs. Emphasis is placed on equipment failure, maintenance management software, and techniques such as vibration and infrared analysis. Upon completion, students should be able to demonstrate an understanding of modern analytical and documentation methods.

### **MNT 230 Pumps & Piping Systems (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course covers pump installation and maintenance and related valves and piping systems. Topics include various types of pump systems and their associated valves, piping requirements, and other related topics. Upon completion, students should be able to select and install pump and piping systems and demonstrate proper maintenance and troubleshooting procedures.

## **Therapeutic Massage**

### **MTH 110 Therapeutic Massage I (6-12-0-10)**

Corequisites: BIO 163, MED 120, PSY 110

This course introduces concepts basic to the role of the massage therapist. Emphasis is placed on beginning theory and techniques of bodywork as well as skill in therapeutic touch. Upon completion of the course the student should be able to apply basic practical massage therapy skills.

### **MTH 120 Therapeutic Massage II (6-12-0-10)**

Prerequisites: MTH 110

Corequisites: BIO 155

This course provides an expanded knowledge and skill base for the massage therapist. Emphasis is placed on selected therapeutic approaches throughout the life span. Upon completion of this course the student should be able to perform entry level massage therapy techniques.

### **MTH 125 Therapeutic Massage III (2-0-0-2)**

Prerequisites: MTH 110, MTH 120

Corequisites: None

This course is designed to explore issues related to the practice of massage therapists. Emphasis is placed on ethical, legal, professional, and political issues. Upon completion of this course the student should be able to discuss issues relating to the prac-

tice of massage therapy. Students will demonstrate skill in utilizing computer hardware and software related to therapeutic massage.

### **MTH 210 Therapeutic Massage IV (4-12-0-8)**

Prerequisites: MTH 110, MTH 120, MTH 125

Corequisites: BIO 271

This course provides knowledge and skills in diverse bodywork modalities. Emphasis is placed on selected techniques such as Neuromuscular Therapy, Strain/Counter Strain Therapy, Oriental Therapies, Reflexology, and Reiki. Upon completion of this course the student should be able to perform basic skills in techniques covered.

### **MTH 220 Therapeutic Massage V (4-10-0-7)**

Prerequisites: MTH 110, MTH 120, MTH 125, MTH 210

Corequisites: COE 111

This course provides knowledge and skills in more complex body works modalities. Emphasis is placed on selected techniques such as Myofascial Release, Injury Massage, and Hydrotherapy. Upon completion of this course the student should be able to perform basic skills in techniques covered.

## **Music**

### **MUS 110 Music Appreciation (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

### **MUS 111 Fundamentals of Music (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course is an introductory course for students with little or no music background. Emphasis is placed on music notation, rhythmic patterns, scales, key signatures, intervals, and chords. Upon completion, students should be able to demonstrate an understanding of the rudiments of music. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

### **MUS 112 Introduction to Jazz (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. This course has been approved to satisfy the



Comprehensive Articulation Agreement general education core requirement in humanities/ fine arts.

**MUS 113 American Music (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces various musical styles, influences, and composers of the United States from pre-Colonial times to the present. Emphasis is placed on the broad variety of music particular to American culture. Upon completion, students should be able to demonstrate skills in basic listening and understanding of American music. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**MUS 115 Orchestral Music (3-0-0-3)**

Prerequisites: MUS 110

Corequisites: None

This course covers representational orchestral and chamber works from the Baroque period to the present. Emphasis is placed on the characteristics of important orchestral forms and styles. Upon completion, students should be able to demonstrate skills in listening to and analyzing orchestral music. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 121 Music Theory I (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course provides an in-depth introduction to melody, rhythm, and harmony. Emphasis is placed on fundamental melodic, rhythmic, and harmonic analysis, introduction to part writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 122 Music Theory II (3-2-0-4)**

Prerequisites: MUS 121

Corequisites: None

This course is a continuation of studies begun in MUS 121. Emphasis is placed on advanced melodic, rhythmic, and harmonic analysis and continued studies in part-writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 131 Chorus I (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to gain experience singing in a chorus. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to

demonstrate skills needed to participate in choral singing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 132 Chorus II (0-2-0-1)**

Prerequisites: MUS 131

Corequisites: None

This course provides a continuation of studies begun in MUS 131. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 135 Jazz Ensemble I (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course provides an opportunity for those who play an appropriate instrument to gain experience playing in a jazz ensemble. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 136 Jazz Ensemble II (0-2-0-1)**

Prerequisites: MUS 135

Corequisites: None

This course is a continuation of MUS 135. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 141 Ensemble I (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to perform in any combination of instrumental, vocal, or keyboard groups of two or more. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.



**MUS 142 Ensemble II (0-2-0-1)**

Prerequisites: MUS 141

Corequisites: None

This course is a continuation of MUS 141. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 151 Class Music I (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 152 Class Music II (0-2-0-1)**

Prerequisites: MUS 151

Corequisites: None

This course is a continuation of MUS 151. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 161 Applied Music I (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 162 Applied Music II (0-2-0-1)**

Prerequisites: MUS 161

Corequisites: None

This course is a continuation of MUS 161. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 170 Business of Music (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the basic elements of the music business. Topics include copyright law, musical arrangements and abridgements, recording and songwriting contracts, agents and managers, performing rights organizations, and the musician's union. Upon completion, students should be able to demonstrate an understanding of the basic elements of the music business. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 175 Recording Techniques 1 (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the recording studio from an artistic and operational point of view. Emphasis is placed on audio consoles, microphones, multitrack recorders, and echo chambers. Upon completion, students should be able to demonstrate understanding of operation and function of recording equipment and its relationship to musician, sound engineer, and producer. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 210 History of Rock Music (3-0-0-3)**

Prerequisites: MUS 110

Corequisites: None

This course is a survey of Rock music from the early 1950's to the present. Emphasis is placed on musical groups, soloists, and styles related to the evolution of this idiom and on related historical and social events. Upon completion, students should be able to identify specific styles and to explain the influence of selected performers within their respective eras. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 212 American Musical Theatre (3-0-0-3)**

Prerequisites: MUS I 10

Corequisites: None

This course covers the origins and development of the musical from Show Boat to the present. Emphasis is placed on the investigation of the structure of the musical and its components through listening and analysis. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 213 Opera and Musical Theatre (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the origins and development of opera and musical theatre from the works of Claudio Monteverdi to the present. Emphasis is placed on how the structure and components of opera and musicals effect dramaturgy through lis-



tening examples and analysis. Upon completion, students should be able to demonstrate analytical and listening skills in understanding both opera and the musical. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**MUS 214 Electronic Music 1 (1-2-0-2)**

Prerequisites: MUS 111

Corequisites: None

This course provides an opportunity to study and explore various electronic instruments and devices. Emphasis is placed on fundamental MIDI applications and implementation, features and application of sequences, sound modules, and digital keyboards. Upon completion, students should be able to demonstrate proficiency by creation of appropriate musical projects using the equipment and techniques covered. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 217 Elementary Conducting (1-2-0-2)**

Prerequisites: MUS 111

Corequisites: None

This course introduces the basic patterns and skills for conducting instrumental and vocal groups. Emphasis is placed on conducting beat patterns, expressive gestures, fermatas, accents, tempos, and rehearsal techniques. Upon completion, students should be able to demonstrate the above skills by conducting vocal and/or instrumental groups. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 221 Music Theory III (3-2-0-4)**

Prerequisites: MUS 122

Corequisites: None

This course is a continuation of MUS 122. Emphasis is placed on altered and chromatic harmony, common practice era compositional techniques and forms, and continued studies in part writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 222 Music Theory IV (3-2-0-4)**

Prerequisites: MUS 221

Corequisites: None

This course is a continuation of studies begun in MUS 221. Emphasis is placed on continued study of common practice era compositional techniques and forms, 20th century practices, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 231 Chorus III (0-2-0-1)**

Prerequisites: MUS 132

Corequisites: None

This course is a continuation of MUS 132. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 232 Chorus IV (0-2-0-1)**

Prerequisites: MUS 231

Corequisites: None

This course is a continuation of MUS 231. Emphasis is placed on vocal techniques and the study of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 235 Jazz Ensemble III (0-2-0-1)**

Prerequisites: MUS 136

Corequisites: None

This course is a continuation of MUS 136. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 236 Jazz Ensemble IV (0-2-0-1)**

Prerequisites: MUS 235

Corequisites: None

This course is a continuation of MUS 235. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**MUS 251 Class Music III (0-2-0-1)**

Prerequisites: MUS 152

Corequisites: None

This course is a continuation of MUS 152. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.



**MUS 252 Class Music IV (0-2-0-1)**

Prerequisites: MUS 251

Corequisites: None

This course is a continuation of MUS 251. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to, demonstrate proficiency in the studied skills and repertoire through performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

**MUS 253 Big Band (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course includes the Big Band instrumentation of five saxes, four trumpets, four trombones, and four-piece rhythm section (bass, piano, drums, and guitar). Emphasis is placed on learning the repertoire specifically written for Big Band instrumentation. Upon completion, students should be able to demonstrate skills needed to participate in performance of Big Band music. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

**MUS 265 Piano Pedagogy (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course introduces the basic methods and materials of piano instruction. Emphasis is placed on basic teaching techniques and piano literature appropriate for various skill levels. Upon completion, students should be able to identify and utilize appropriate teaching methods and materials for various levels of piano instruction. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

**MUS 271 Music History I (3-0-0-3)**

Prerequisites: MUS 122

Corequisites: None

This course is the first of a two-semester, in-depth study of music history. Emphasis is placed on the history and literature of music from Antiquity through the Baroque Period. Upon completion, students should be able to trace important musical developments and demonstrate an understanding of the composers' styles. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.

**MUS 272 Music History II (3-0-0-3)**

Prerequisites: MUS 271

Corequisites: None

This course is the second of a two-semester, indepth study of music history. Emphasis is placed on the history and literature of music from the Classical Period to the present. Upon completion, students should be able to trace important musical developments and demonstrate an understanding of the composers' styles. This course has been approved to satisfy the Comprehensive Articulation

Agreement for transferability as a pre-major and/or elective course requirement.

**Nursing Assistant****NAS 101 Nursing Assistant I (3-2-3-5)**

Prerequisites: None

Corequisites: None

This course introduces basic nursing skills required to provide personal care for patients, residents, or clients in a health care setting. Topics include communications, safety, patients' rights, personal care, vital signs, elimination, nutrition, emergencies, rehabilitation, and mental health. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant I with the North Carolina Nurse Aide I Registry.

**NAS 102 Nursing Assistant II (3-2-6-6)**

Prerequisites: High School diploma or GED;

must be listed on CNAI registry.

Corequisites: None

This course provides training in selected advanced nursing assistant procedures. Emphasis is placed on sterile techniques, respiratory procedures, catheterizations, wound and trach care, irrigations, and ostomy care. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant II with the North Carolina Board of Nursing.

**NAS 103 Home Health Care (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers basic health issues that affect clients in the home setting. Emphasis is placed on home safety, recognizing significant changes in the client's condition, family dynamics, and use of home health care equipment. Upon completion, students should be able to identify care for clients at home.

**Networking****NET 110 Data Comm/Networking (2-2-0-3)**

Prerequisites: (CIS 110 or CIS 111), CIS 115, CIS 130

Corequisites: None

This course introduce data communication and networking. Topics include telecommunication standards, protocols, equipment, network topologies, communication software, LANs, WANs, the Internet, and network operating systems. Upon completion, students should be able to demonstrate understanding of the fundamentals of telecommunication and networking.

**Nursing****NUR 101 Practical Nursing I (7-6-6-11)**

Prerequisites: None

Corequisites: BIO 163, PSY 110, NUR 118

This course introduces concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, legal/ethical/professional issues, wellness/illness patterns, and basic nursing skills. Upon completion, students should be able to demonstrate begin-



ning understanding of nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span.

### **NUR 102 Practical Nursing II (8-0-12-12)**

Prerequisites: NUR 101

Corequisites: NUR 117, ENG 111

This course includes more advanced concepts as related to the practical nurse's caregiver and discipline-specific roles. Emphasis is placed on the nursing process, delegation, cost effectiveness, legal/ethical/professional issues, and wellness/illness patterns. Upon completion, students should be able to begin participating in the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span. This course will include the essentials of maternity nursing with emphasis on safe and effective care for mothers, infants, and families.

### **NUR 103 Practical Nursing III (6-0-12-10)**

Prerequisites: NUR 102

Corequisites: None

This course focuses on use of nursing/related concepts by practical nurses as providers of care/ members of discipline in collaboration with health team members. Emphasis is placed on the nursing process, wellness/illness patterns, entry-level issues, accountability, advocacy, professional development, evolving technology, and changing health care delivery systems. Upon completion, students should be able to use the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span. Students will demonstrate competency in computer skills as they relate to NCLEX-PN testing.

### **NUR 115 Fundamentals of Nursing (2-3-6-5)**

Prerequisites: None

Corequisites: BIO 168, ENG 111, PSY 150

This course introduces concepts basic to beginning nursing practice. Emphasis is placed on the application of the nursing process to provide and manage care as a member of the discipline of nursing. Upon completion, students should be able to demonstrate beginning competence in caring for individuals with common alterations of health. Students will demonstrate competency in computer and pharmacology calculations skills.

### **NUR 117 Pharmacology (1-3-0-2)**

Prerequisites: None

Corequisites: NUR 102

This course introduces information concerning sources, effects, legalities, and the safe use of medications as therapeutic agents. Emphasis is placed on nursing responsibility, accountability, and application of the nursing process regarding drug therapy. Upon completion, students should be able to compute dosages and administer medication safely. Students will demonstrate the level of math competency required to accurately calculate dosages of medicines.

### **NUR 118 Nutrition/Diet Therapy (2-0-0-2)**

Prerequisites: None

Corequisites: NUR 101

This course covers the six nutrient categories and provides an overview of diet recommendations for

promotion and maintenance of health. Topics include the food pyramid recommendations for individuals across the life span, energy balance, and special dietary modifications for common alterations in health. Upon completion, students should be able to assist in completing nutritional assessments, analyzing diets, and reinforcing dietary adaptations to meet individual health needs.

### **NUR 125 Maternal-Child Nursing (5-3-6-8)**

Prerequisites: NUR 133, NUR 135, NUR 188, NUR 115

Corequisites: SOC 210

This course introduces nursing concepts related to the delivery of nursing care for the expanding family. Emphasis is placed on utilizing the nursing process as a framework for managing/providing nursing care to individuals and families along the wellness-illness continuum. Upon completion, students should be able to utilize the nursing process to deliver nursing care to mothers, infants, children, and families. Students will demonstrate competency in computer and pharmacology calculations skills.

### **NUR 133 Nursing Assessment (2-3-0-3)**

Prerequisites: None

Corequisites: NUR 115, BIO 168, ENG 111

This course provides theory and application experiences for performing nursing assessment of individuals across the life span. Emphasis is placed on interviewing, and physical assessment techniques and documentation of findings appropriate for nursing. Upon completion, students should be able to complete a health history and perform a noninvasive physical assessment. Students will demonstrate competency in computer skills.

### **NUR 135 Adult Nursing I (5-3-9-9)**

Prerequisites: NUR 115, NUR 133

Corequisites: BIO 169, PSY 281

This course introduces concepts related to the nursing care of individuals experiencing acute and chronic alterations in health. Emphasis is placed on utilizing the nursing process as a framework for providing and managing nursing care to individuals along the wellness-illness continuum. Upon completion, students should be able to apply the nursing process to individuals experiencing acute and chronic alterations in health. Students will demonstrate competency in computer and pharmacology calculations skills.

### **NUR 185 Mental Health Nursing (3-0-6-5)**

Prerequisites: NUR 115, NUR 133, NUR 135, NUR 188

Corequisites: BIO 175, ENG 114, NUR 188

This course includes concepts related to the nursing care of individuals experiencing alterations in social and psychological functioning. Emphasis is placed on utilizing the nursing process to provide and manage nursing care for individuals with common psychiatric disorders or mental health needs. Upon completion, students should be able to apply psychosocial theories in the nursing care of individuals with psychiatric/mental health needs. Students will demonstrate competency in computer and pharmacology calculations skills.



**NUR 188 Nursing in the Community (1-0-6-3)**

Prerequisites: NUR 115, NUR 133, NUR 135

Corequisites: NUR 185, ENG 114, BIO 175

This course introduces concepts and practices of community-based nursing care across the life span. Topics include home care history, agency regulation/standards, nurse's roles, the interdisciplinary team, and the application of nursing care to the community setting. Upon completion, students should be able to provide nursing care, manage nursing care, and function as a member of the discipline in home health care. Students will demonstrate competency in computer and pharmacology calculations skills.

**NUR 235 Adult Nursing II (4-3-15-10)**

Prerequisites: NUR 115, NUR 125, NUR 133,  
NUR 135, NUR 185, NUR 188

Corequisites: NUR 255

This course provides expanded concepts related to nursing care for individuals experiencing common complex alterations in health. Emphasis is placed on the nurse's role as a member of a multidisciplinary team and as a manager of care for a group of individuals. Upon completion, students should be able to provide comprehensive nursing care for groups of individuals with common complex alterations in health. Students will demonstrate competency in computer and pharmacology calculations skills.

**NUR 255 Professional Issues (3-0-0-3)**

Prerequisites: NUR 115, NUR 125, NUR 133,  
NUR 135, NUR 188, NUR 185

Corequisites: NUR 235

This course explores basic concepts of practice in the management of patient care in a complex health care system. Emphasis is placed on professional, legal, ethical, and political issues and management concepts. Upon completion, students should be able to articulate professional and management concepts. Students will demonstrate competency in computer and pharmacology calculations skills.

**Office Systems Technology****OST 122 Office Computations (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course introduces the keypad and the touch method using the electronic calculator. Topics include mathematical functions in business applications. Upon completion, students should be able to use the electronic calculator to solve a wide variety of problems commonly encountered in business. Students will also gain exposure in using the 10-key pad on the computer keyboard.

**OST 131 Keyboarding (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system.

**OST 132 Keyboard Skill Building (1-2-0-2)**

Prerequisites: OST 131

Corequisites: None

This course provides accuracy- and speed-building drills. Emphasis is placed on diagnostic tests to identify accuracy and speed deficiencies followed by corrective drills. Upon completion, students should be able to keyboard rhythmically with greater accuracy and speed.

**OST 134 Text Entry & Formatting (2-2-0-3)**

Prerequisites: OST 131

Corequisites: None

This course is designed to provide the skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce mailable documents. Students must demonstrate a proficiency in the touch system of keyboarding prior to taking this course or take OST 131 Keyboarding.

**OST 135 Adv Text Entry & Formatting (3-2-0-4)**

Prerequisites: OST 134

Corequisites: None

This course is designed to incorporate computer application skills in the generation of office documents. Emphasis is placed on the production of letters, manuscripts, business forms, tabulation, legal documents, and newsletters. Upon completion, students should be able to make independent decisions regarding planning, style, and method of presentation.

**OST 136 Word Processing (1-2-0-2)**

Prerequisites: OST 131

Corequisites: None

This course introduces word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment.

**OST 141 Medical Terms I Med Office (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course uses a language-structure approach to present the terminology and vocabulary that will be encountered in medical office settings. Topics include word parts that relate to systemic components, conditions, pathology, and disorder remediation in approximately one-half of the systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

**OST 142 Medical Terms II Med Office (3-0-0-3)**

Prerequisites: OST 141

Corequisites: None

This course is a continuation of OST 141 and continues the study, using a language-structure approach, of medical office terminology and vocabulary. Topics include word parts that relate to systemic components, conditions, pathology, and



disorder remediation in the remaining systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

### **OST 148 Medical Coding Billing & Insurance (3-0-0-3)**

Prerequisites: OST 141

Corequisites: None

This course introduces CPT and ICD coding as they apply to medical insurance and billing. Emphasis is placed on accuracy in coding, forms preparation, and posting. Upon completion, students should be able to describe the steps of the total billing cycle and explain the importance of accuracy.

### **OST 149 Medical Legal Issues (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior.

### **OST 155 Legal Terminology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the terminology appropriate to the legal profession. Topics include legal research, court systems, litigation, civil and criminal law, probate, real and personal property, contracts and leases, domestic relations, equity, and corporations. Upon completion, students should be able to spell, pronounce, define, and demonstrate an understanding of the use of these legal terms.

### **OST 156 Legal Office Procedures (2-2-0-3)**

Prerequisites: OST 134

Corequisites: None

This course covers legal office functions involved in the operation of a law office. Emphasis is placed on procedures in the law office involving the court system, legal research, litigation, probate, and real estate, personal injury, criminal, and civil law. Upon completion, students should be able to demonstrate a high level of competence in performing legal office duties.

### **OST 164 Text Editing Applications (3-0-0-3)**

Prerequisites: ENG 090

Corequisites: None

This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

### **OST 184 Records Management (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to set up and maintain a records management system. A computerized software program will be utilized in the storage of data.

### **OST 201 Medical Transcription I (3-2-0-4)**

Prerequisites: BIO 163, OST 131 and OST 141 or MED 121

Corequisites: OST 136 and OST 164, MED 122 or OST 142

This course introduces dictating equipment and typical medical dictation. Emphasis is placed on efficient use of equipment, dictionaries, PDRs, and other reference materials. Upon completion, students should be able to efficiently operate dictating equipment and to accurately transcribe a variety of medical documents in a specified time. This course is intended for diploma programs.

### **OST 202 Medical Transcription II (3-2-0-4)**

Prerequisites: OST 201

Corequisites: None

This course provides additional practice in transcribing documents from various medical specialties. Emphasis is placed on increasing transcription speed and accuracy and understanding medical procedures and terminology. Upon completion, students should be able to accurately transcribe a variety of medical documents in a specified time. This course is intended for diploma programs.

### **OST 203 Fund of Med Doc (3-0-0-3)**

Prerequisites: None

Corequisites: MED 121 or OST 141

This course covers the information and procedures necessary for producing acceptable medical documentation. Topics include digital dictation systems; workplace security systems; the access, retrieval, and transport of medical documents and other transcribing techniques necessary for acceptable medical documentation. Upon completion, students should be able to process medical documents in a home-based or medical facility.

### **OST 223 Machine Transcription I (1-2-0-2)**

Prerequisites: OST 136, OST 164

Corequisites: OST 134

This course covers the use of transcribing machines to produce mailable documents. Emphasis is placed on appropriate formatting, advanced text editing skills, and transcription techniques. Upon completion, students should be able to transcribe documents into mailable copy.

### **OST 233 Office Publications Design (2-2-0-3)**

Prerequisites: OST 136

Corequisites: None

This course provides entry-level skills in using software with desktop publishing capabilities. Topics include principles of page layout, desktop publishing terminology and applications, and legal



and ethical considerations of software use. Upon completion, students should be able to design and produce professional business documents and publications.

**OST 236 Adv Word/Information Processing (2-2-0-3)**

Prerequisites: OST 136

Corequisites: None

This course develops proficiency in the utilization of advanced word/information processing functions. Topics include tables, graphics, macros, sorting, document assembly, merging, and newspaper and brochure columns. Upon completion, students should be able to produce a variety of complex business documents.

**OST 241 Med Ofc Transcription I (1-2-0-2)**

Prerequisites: OST 131, OST 136, OST 142

Corequisites:

This course introduces machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription, proofreading, and use of reference materials as well as vocabulary building. Upon completion, students should be able to prepare accurate and usable transcripts of voice recordings in the covered specialties.

**OST 242 Med Ofc Transcription II (1-2-0-2)**

Prerequisites: OST 241

Corequisites: None

This course continues building machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription, proofreading, and use of reference materials as well as continued proofreading/editing skills and vocabulary building. Upon completion, students should be able to perform competently in preparing accurate and usable transcripts of voice recordings in the covered specialties.

**OST 243 Med Office Simulation (2-2-0-3)**

Prerequisites: OST 134, OST 142, OST 148

Corequisites: None

This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, storing and retrieving information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections.

**OST 247 CPT Coding in the Med Off (1-2-0-2)**

Prerequisites: MED 122 or OST 142, OST 148

Corequisites: None

This course provides in-depth coverage of procedural coding. Emphasis is placed on CPT and HCPCS rules for Medicare billing. Upon completion, students should be able to properly code procedures and services performed by physicians in ambulatory settings.

**OST 248 Diagnostic Coding (1-2-0-2)**

Prerequisites: MED 122 or OST 142, OST 148

Corequisites: None

This course provides an in-depth study of diagnostic coding for the medical office. Emphasis is

placed on ICD-9-CM codes used on superbills and other encounter forms. Upon completion, students should be able to apply the principles of diagnostic coding in the physician's office.

**OST 251 Legal Doc Formatting (2-2-0-3)**

Prerequisites: OST 134, OST 155

Corequisites: None

This course is designed to provide experience in the preparation of various types of legal forms and documents. Emphasis is placed on formatting and keying legal forms, documents, and correspondence. Upon completion, students should be able to produce these documents with accuracy and speed.

**OST 252 Legal Transcription I (2-2-0-3)**

Prerequisites: OST 136, OST 155, and OST 134 or OST 251

Corequisites: None

This course provides experience in using the transcriber to produce legal correspondence, forms, and documents with mailable accuracy from recorded tapes. Emphasis is placed on operating the transcriber, developing listening skills to translate the audio into hard copy, and producing mailable documents. Upon completion, students should be able to transcribe legal forms and documents with reasonable accuracy. This course is a unique concentration requirement in the Legal Office Systems concentration in the Office Systems Technology program.

**OST 284 Emerging Technologies (1-2-0-2)**

Prerequisites: OST 236

Corequisites: None

This course provides opportunities to explore emerging technologies. Emphasis is placed on identifying, researching, and presenting current technological topics for class consideration and discussion. Upon completion, students should be able to understand the importance of keeping abreast of technological changes that affect the office professional.

**OST 286 Professional Development (3-0-0-3)**

Prerequisites: OST 131

Corequisites: OST 136

This course covers the personal competencies and qualities needed to project a professional image in the office. Topics include interpersonal skills, health lifestyles, appearance, attitude, personal and professional growth, multi-cultural awareness, and professional etiquette. Upon completion, students should be able to demonstrate these attributes in the classroom, office, and society.

**OST 289 Office Systems Management (2-2-0-3)**

Prerequisites: OST 134, OST 136, OST 164

Corequisites: None

This course provides a capstone course for the office professional. Topics include administrative office procedures, imaging, communication techniques, ergonomics, and equipment utilization. Upon completion, students should be able to function proficiently in a changing office environment.



**Paralegal - See Legal Education (LEX)**

## **Phlebotomy**

### **PBT 100 Phlebotomy Technology (5-2-0-6)**

Prerequisite: Enrollment in the Phlebotomy Technology Program

Corequisites: PBT 101 This course provides instruction in the skills needed for the proper collection of blood and other specimens used for diagnostic testing. Emphasis is placed on ethics, legalities, medical terminology, safety and universal precautions, health care delivery systems, patient relations, anatomy and physiology, and specimen collection. Upon completion, students should be able to demonstrate competence in the theoretical comprehension of phlebotomy techniques. This is a certificate-level course.

### **PBT 101 Phlebotomy Practicum (0-0-9-3)**

Prerequisite: Enrollment in the Phlebotomy Technology Program

Corequisites: PBT 100

This course provides supervised experience in the performance of venipuncture and microcollection techniques in a clinical facility. Emphasis is placed on patient interaction and application of universal precautions, proper collection techniques, special procedures, specimen handling, and data management. Upon completion, students should be able to safely perform procedures necessary for specimen collections on patients in various healthcare settings. This is a certificate-level course.

## **Physical Education**

### **PED 110 Fit and Well for Life (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests. This course has been approved for transfer through the Comprehensive Articulation Agreement.

### **PED 111 Physical Fitness I (0-3-0-1)**

Prerequisites: None

Corequisites: None

This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. Upon completion, students should be able to set up and implement an individualized physical fitness program. This course has been approved for transfer through the Comprehensive Articulation Agreement.

### **PED 112 Physical Fitness II (0-3-0-1)**

Prerequisites: PED III or instructor permission

Corequisites: None

This course is an intermediate-level fitness class. Topics include specific exercises contributing to

fitness and the role exercise plays in developing body systems. Upon completion, students should be able to implement and evaluate an individualized physical fitness program. This course has been approved for transfer through the Comprehensive Articulation Agreement.

### **PED 113 Aerobics I (0-3-0-1)**

Prerequisites: None

Corequisites: None

This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program. This course has been approved for transfer through the Comprehensive Articulation Agreement.

### **PED 114 Aerobics II (0-3-0-1)**

Prerequisites: PED 113

or instructor permission

Corequisites: None

This course provides a continuation of a program of cardiovascular fitness involving rhythmic exercise. Emphasis is placed on a wide variety of aerobic activities which include cardiovascular efficiency, strength, and flexibility. Upon completion, students should be able to participate in and design a rhythmic aerobic exercise routine. This course has been approved for transfer through the Comprehensive Articulation Agreement.

### **PED 117 Weight Training I (0-3-0-1)**

Prerequisites: None

Corequisites: None

This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program. This course has been approved for transfer through the Comprehensive Articulation Agreement.

### **PED 118 Weight Training II (0-3-0-1)**

Prerequisites: PED 117

Corequisites: None

This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight training program. This course has been approved for transfer through the Comprehensive Articulation Agreement.

### **PED 119 Circuit Training (0-3-0-1)**

Prerequisites: None

Corequisites: None

This course covers the skills necessary to participate in a developmental fitness program. Emphasis is placed on the circuit training method which involves a series of conditioning timed stations arranged for maximum benefit and variety. Upon completion, students should be able to understand and appreciate the role of circuit training as a means to develop fitness. This course has been



approved for transfer through the Comprehensive Articulation Agreement.

**PED 122 Yoga I (0-3-0-1)**

Prerequisites: None

Corequisites: None

This course introduces the basic discipline of yoga. Topics include proper breathing, relaxation techniques, and correct body positions. Upon completion, students should be able to demonstrate the procedure of yoga. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 123 Yoga II (0-2-0-1)**

Prerequisites: PED 122

or instructor permission

Corequisites: None

This course introduces more detailed aspects of the discipline of yoga. Topics include breathing and physical postures, relaxation, and mental concentration. Upon completion, students should be able to demonstrate advanced procedures of yoga. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 128 Golf-Beginning (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 129 Golf-Intermediate (0-2-0-1)**

Prerequisites: PED 128 or instructor permission

Corequisites: None

This course covers the more advanced phases of golf. Emphasis is placed on refining the fundamental skills and learning more advanced phases of the games such as club selection, trouble shots, and course management. Upon completion, students should be able demonstrate the knowledge and ability to play a recreational round of golf. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 130 Tennis-Beginning (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 131 Tennis-Intermediate (0-2-0-1)**

Prerequisites: PED 130 or instructor permission

Corequisites: None

This course emphasizes the refinement of playing skills. Topics include continuing the development

of fundamentals, learning advanced serves, and strokes and pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 138 Archery (0-2-0-1)**

Prerequisites: None

Corequisites: None This course introduces basic archery safety and skills. Topics include proper techniques of stance, bracing, drawing, and releasing as well as terminology and scoring. Upon completion, students should be able to participate safely in target archery. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 139 Bowling-Beginning (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course introduces the fundamentals of bowling. Emphasis is placed on ball selection, grips, stance, and delivery along with rules and etiquette. Upon completion, students should be able

to participate in recreational bowling. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 140 Bowling-Intermediate (0-2-0-1)**

Prerequisites: PED 139 or instructor

Corequisites: None

This course covers more advanced bowling techniques. Emphasis is placed on refining basic skills and performing advanced shots, spins, pace, and strategy. Upon completion, students should be able to participate in competitive bowling. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 142 Lifetime Sports (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course is designed to give an overview of a variety of sports activities. Emphasis is placed on the skills and rules necessary to participate in a variety of lifetime sports. Upon completion, students should be able to demonstrate an awareness of the importance of participating in lifetime sports activities. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 143 Volleyball-Beginning (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course covers the fundamentals of volleyball. Emphasis is placed on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball. This course has been approved for transfer through the Comprehensive Articulation Agreement.



**PED 144 Volleyball-Intermediate (0-2-0-1)**

Prerequisites: PED 143 or instructor permission

Corequisites: None

This course covers more advanced volleyball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to participate in competitive volleyball. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 145 Basketball-Beginning (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course covers the fundamentals of basketball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational basketball. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 172 Outdoor Living (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course is designed to acquaint the beginning camper with outdoor skills. Topics include camping techniques such as cooking and preserving food, safety, and setting up camp. Upon completion, students should be able to set up camp sites in field experiences using proper procedures. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 181 Snow Skiing-Beginning (0-2-0-1)**

Prerequisites: None

Corequisites: None

This course introduces the fundamentals of snow skiing. Topics include basic techniques, safety, and equipment involved in snow skiing. Upon completion, students should be able to ski a down slope, enter and exit a ski lift, and perform basic maneuvers on skis. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PED 182 Snow Skiing Intermediate (0-2-0-1)**

Prerequisites: PED 181 or instructor permission

Corequisites: None

This course is designed to further develop snow skiing skills. Topics include selection and care of equipment, parallel skiing and turns, chfisties, advanced jumps, trail skiing, and slalom racing. Upon completion, students should be able to ski on varying terrains and snow conditions with control and safety. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**Philosophy****PHI 210 History of Philosophy (3-0-0-3)**

Prerequisites: ENG 111, RED 090

Corequisites: None

This course introduces fundamental philosophical issues through an historical perspective. Emphasis is placed on such figures as Plato, Aristotle, Lao Tzu, Confucius, Augustine, Aquinas, Descartes, Locke, Kant, Wollstonecraft, Nietzsche, and Sartre.

Upon completion, students should be able to identify and distinguish among the key positions of the philosophers studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**PHI 215 Philosophical Issues (3-0-0-3)**

Prerequisites: ENG 111, RED 090

Corequisites: None

This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critique the philosophical components of an issue. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/ fine arts.

**PHI 220 Western Philosophy 1 (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: None

This course covers Western intellectual and philosophical thought from the early Greeks through the medievalists. Emphasis is placed on such figures as the pre-Socratics, Plato, Aristotle, Epicurus, Epictetus, Augustine, Suarez, Anselm, and Aquinas. Upon completion, students should be able to trace the development of leading ideas regarding reality, knowledge, reason, and faith. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**PHI 221 Western Philosophy II (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: None

This course covers Western intellectual and philosophical thought from post-medievalists through recent thinkers. Emphasis is placed on such figures as Descartes, Spinoza, Leibnitz, Locke, Berkeley, Hume, Kant, Hegel, Marx, Mill, and representatives of pragmatism, logical positivism, and existentialism. Upon completion, students should be able to trace the development of leading ideas concerning knowledge, reality, science, society, and the limits of reason. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**PHI 230 Introduction to Logic (3-0-0-3)**

Prerequisites: ENG 111, RED 090

Corequisites: None

This course introduces basic concepts and techniques for distinguishing between good and bad reasoning. Emphasis is placed on deduction, induction, validity, soundness, syllogisms, truth functions, predicate logic, analogical inference, common fallacies, and scientific methods. Upon completion, students should be able to analyze arguments, distinguish between deductive and inductive arguments, test validity, and appraise inductive reasoning. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.



**PHI 240 Introduction to Ethics (3-0-0-3)**

Prerequisites: ENG 111, RED 090

Corequisites: None

This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**PHI 250 Philosophy of Science (3-0-0-3)**

Prerequisites: ENG 111, MAT 161

Corequisites: None

This course introduces the concepts of empirical observations and laws and their role in scientific explanation, prediction, and theory formation. Topics include the relationship between the philosophy of science and inductive/deductive logic, analytic philosophy, logical empiricism, and explanatory paradigms. Upon completion, students should be able to describe the development and role of scientific explanation, prediction, theory formation, and explanatory paradigms in the natural and social sciences. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**Physical Science****PHS 110 Basic Physical Science (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces the physical environment with emphasis on the laws and physical concepts that impact the world and universe. Topics include astronomy, geology, meteorology, general chemistry, and general physics. Upon completion, students should be able to describe the forces and composition of the earth and universe. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**PHS 130 Earth Science (3-2-0-4)**

Prerequisites: RED 090

Corequisites: None

This course is a survey of the forces that impact the earth. Topics include geology, oceanography, and meteorology. Upon completion, students should be able to explain and identify the forces within, on, and around the earth as they influence the earth's dynamics. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**PHS 140 Weather and Climate (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the nature, origin, processes, and dynamics of the earth's atmospheric environment. Topics include general weather patterns, climate, and ecological influences on the atmos-

phere. Upon completion, students should be able to demonstrate an understanding of weather, formation, precipitation, storm patterns, and processes of atmospheric pollution. This course has been approved for transfer through the Comprehensive Articulation Agreement.

**Physics****PHY 121 Applied Physics I (3-2-0-4)**

Prerequisites: None

Corequisites: None

This algebra-based course introduces fundamental physical concepts as applied to industrial and service technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied in industrial and service fields.

**PHY 122 Applied Physics II (3-2-0-4)**

Prerequisites: None

Corequisites: None

This algebra-based course introduces fundamental physical concepts as applied to industrial and service technology fields. Emphasis is placed on systems of units, problem-solving methods, graphical analysis, static electricity, AC and DC circuits, magnetism, transformers, AC and DC motors, and generators. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied in industrial and service fields.

**PHY 131 Physics-Mechanics (3-2-0-4)**

Prerequisites: MAT 121 or MAT 161

Corequisites: None

This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

**PHY 132 Physics-Elec & Magnetism (3-2-0-4)**

Prerequisites: PHY 131

Corequisites: None

This algebra/trigonometry-based course is a study of fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, waves, electricity, magnetism, circuits, transformers, motors, and generators. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

**PHY 133 Physics-Sound & Light (3-2-0-4)**

Prerequisites: PHY 131

Corequisites: None

This algebra/trigonometry-based course is a study of fundamental physical concepts as applied to engineering technology fields. Topics include sys-



tems of units, problem-solving methods, graphical analysis, wave motion, sound, light, and modern physics. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

**PHY 140 Physics-Mech Structures (3-2-0-4)**

Prerequisites: PHY 131

Corequisites: None

This algebra/trigonometry-based course introduces the analysis of mechanical structures. Topics include equilibrium of two- and three-dimensional forces, centroids, center of gravity, and the analysis of trusses and frames. Upon completion, students should be able to analyze typical structural systems and calculate internal and external forces on structural members.

**PHY 141 Fiber Optics (3-2-0-4)**

Prerequisites: PHY 131

Corequisites: None

This course provides a fundamental understanding of physical principles related to fiber optic systems. Topics include the nature of light, optical fibers, detectors, modulation formats, system design, physical optics, and optical communication. Upon completion, students should be able to demonstrate an understanding of the fundamental principles studied as they relate to practical applications of fiber optic systems.

**PHY 151 College Physics I (3-2-0-4)**

Prerequisites: MAT 162 or MAT 172  
or MAT 175

Corequisites: None

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**PHY 152 College Physics II (3-2-0-4)**

Prerequisites: PHY 151

Corequisites: None

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**PHY 153 Modern Topics in Physics (3-2-0-4)**

Prerequisites: PHY 151

Corequisites: None

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include atomic structure, nuclear processes, natural and artificial radioactivity, basic quantum theory, and special relativity. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

**PHY 251 General Physics I (3-3-0-4)**

Prerequisites: MAT 271

Corequisites: MAT 272

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**PHY 252 General Physics II (3-3-0-4)**

Prerequisites: MAT 272 and PHY 251

Corequisites: None

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.

**PHY 253 Modern Physics (3-3-0-4)**

Prerequisites: PHY 251

Corequisites: None

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include atomic structure, nuclear processes, natural and artificial radioactivity, quantum theory, and special relativity. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.



## **Plastics**

### **PLA 120 Injection Molding (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course provides theory and processing experience with the injection molding process. Topics include machine type, molds, controls, machine-polymer part relationship, molding factors, troubleshooting, and molding problems/solutions. Upon completion, students should be able to demonstrate an understanding of machine setup and operation and be able to optimize common injection molding machines. Additional topics include introduction to polymer chemistry, sources of plastics, forms of plastics, thermoplastics, and thermosetting materials; oral and written communications skills will be emphasized.

### **PLA 162 Plastics Manuf Processes (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers manufacturing processes including machining, sawing, routing, milling, drilling, tapping, turning, thermoforming, molding, extrusion, laminating, reinforcing, expansion, casting, coasting, assembly, and finishing. Emphasis is placed on the process and equipment requirements, special operational concerns, setup, operation, tooling, capability limitations, maintenance, and safety. Upon completion, students should be able to select the correct process for the material required and discuss machine operation, setup, tooling, safety, and scrap recycling. Oral and written communications skills will be emphasized.

### **PLA 230 Adv Plastics Manufacturing (3-3-0-4)**

Prerequisites: PLA 120 and PLA 162

Corequisites: None

This course covers advanced plastics manufacturing processes. Topics include hands-on experience, -material selection, manufacturing cost, process optimization, troubleshooting, and project management. Upon completion, students should be able to understand, perform, and troubleshoot advanced processes in a manufacturing environment. Oral and written communications skills will be emphasized.

**PME - See Industrial Maintenance (MNT)**

## **Political Science**

### **POL 110 Intro Political Science(3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces basic political concepts used by governments and addresses a wide range of political issues. Topics include political theory, ideologies, legitimacy, and sovereignty in democratic and non-democratic systems. Upon completion, students should be able to discuss a variety of issues inherent in all political systems and draw logical conclusions in evaluating these systems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

### **POL 120 American Government (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

### **POL 130 State & Local Government (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course includes state and local political institutions and practices in the context of American federalism. Emphasis is placed on procedural and policy differences as well as political issues in state, regional, and local governments of North Carolina. Upon completion, students should be able to identify and discuss various problems associated with intergovernmental politics and their effect on the community and the individual.

### **POL 210 Comparative Government (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides a cross-national perspective on the government and politics of contemporary nations such as Great Britain, France, Germany, and Russia. Topics include each country's historical uniqueness, key institutions, attitudes and ideologies, patterns of interaction, and current political problems. Upon completion, students should be able to identify and compare various nations' governmental structures, processes, ideologies, and capacity to resolve major problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

### **POL 220 International Relations (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides a study of the effects of ideologies, trade, armaments, and alliances on relations among nation-states. Emphasis is placed on regional and global cooperation and conflict, economic development, trade, non-governmental organizations, and international institutions such as the World Court and UN. Upon completion, students should be able to identify and discuss major international relationships, institutions, and problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

**Pre-Engineering - See EGR**



## **Psychology**

### **PSY 101 Applied Psychology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the basic principles of psychology as they apply to daily life. Topics include perception, emotions, motivation, adjustment, behavior management, communication, and related topics that promote growth and development on the job and in one's personal life. Upon completion, students should be able to apply the principles learned in this class to everyday living.

### **PSY 102 Human Relations (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course covers the skills necessary to handle human relationships effectively. Topics include self-understanding, interpersonal communication, group dynamics, leadership skills, diversity, time and stress management, and conflict resolution with emphasis on work relationships. Upon completion, students should be able to demonstrate improved personal and interpersonal effectiveness.

### **PSY 110 Life Span Development (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an introduction to the study of human growth and development. Emphasis is placed on the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span and apply this knowledge to their specific field of study.

### **PSY 118 Interpersonal Psychology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the basic principles of psychology as they relate to personal and professional development. Emphasis is placed on personality traits, communication/leadership styles, effective problem solving, and cultural diversity as they apply to personal and work environments. Upon completion, students should be able to demonstrate an understanding of these principles of psychology as they apply to personal and professional development.

### **PSY 135 Group Processes (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an examination of group dynamics and structure. Topics include team building, interpersonal communication, leadership, decision making, and problem solving. Upon completion, students should be able to demonstrate the knowledge and skills necessary for effective group participation.

### **PSY 150 General Psychology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course provides an overview of the scientific study of human behavior. Topics include history,

methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

### **PSY 183 Psychology of Addiction (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers historical and theoretical perspectives on addictive behavior and the genetic, familial, and sociocultural influences on addiction. Topics include addictions to eating, gambling, alcohol, drugs, relationships, work, and sex. Upon completion, students should be able to demonstrate a knowledge of the theories of addiction and the factors underlying addictive behaviors.

### **PSY 211 Psychology of Adjustment (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course introduces the study of the adjustment process focusing on contemporary challenges individuals must deal with in everyday life. Topics include theories of behavior, career choices, self-understanding, coping mechanisms, human relationships, intimacy, sociocultural factors influencing healthy personal adjustment, and other related topics. Upon completion, students should be able to demonstrate an awareness of the processes of adjustment. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

### **PSY 237 Social Psychology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the study of individual behavior within social contexts. Topics include affiliation, attitude formation and change, conformity, altruism, aggression, attribution, interpersonal attraction, and group behavior. Upon completion, students should be able to demonstrate an understanding of the basic principles of social influences on behavior. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

### **PSY 239 Psychology of Personality (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course covers major personality theories and personality research methods. Topics include psychoanalytic, behavioristic, social learning, cognitive, humanistic, and trait theories including supporting research. Upon completion, students should be able to compare and contrast traditional and contemporary approaches to the understanding of individual differences in human behavior. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.



**PSY 241 Developmental Psych (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

**PSY 243 Child Psychology (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course provides an overview of physical, cognitive, and psychosocial development from conception through adolescence. Topics include theories and research, interaction of biological and environmental factors, language development, learning and cognitive processes, social relations, and moral development. Upon completion, students should be able to identify typical and atypical childhood behavior patterns as well as appropriate strategies for interacting with children. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**PSY 244 Child Development I(3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course provides an introduction to the study of child development and examines the growth and development of children from conception through early childhood. Topics include historical and theoretical perspectives, terminology, research and observation techniques as well as physical, cognitive, and psychosocial growth and change. Upon completion, students should be able to demonstrate an understanding of the early stages of child development.

**PSY 245 Child Development II (3-0-0-3)**

Prerequisites: PSY 244

Corequisites: None

This course examines the growth and development of children during early and middle childhood. Emphasis is placed on factors influencing physical, cognitive, and psychosocial growth and change. Upon completion, students should be able to demonstrate an understanding of early and middle child development.

**PSY 246 Adolescent Psychology (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course provides an overview of the behavior patterns, life changes, and social issues that accompany the developmental stage of adolescence. Topics include developmental theories; physical, cognitive and psychosocial growth; transitions to young adulthood; and sociocultural factors that influence adolescent roles in home, school and community. Upon completion, students should be

able to identify typical and atypical adolescent behavior patterns as well as appropriate strategies for interacting with adolescents. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**PSY 249 Psychology of Aging(3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course covers the particular needs and behaviors of the maturing adult. Emphasis is placed on psychosocial processes; biological and intellectual aspects of aging; adjustments to retirement, dying, bereavement; and the stereotypes and misconceptions concerning the elderly. Upon completion, students should be able to show an understanding of the psychological factors related to the aging process. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**PSY 259 Human Sexuality (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course provides the biological, psychological, and sociocultural aspects of human sexuality and related research. Topics include reproductive biology, sexual and psychosexual development, sexual orientation, contraception, sexually transmitted diseases, sexual disorders, theories of sexuality, and related issues. Upon completion, students should be able to demonstrate an overall knowledge and understanding of human sexuality. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**PSY 281 Abnormal Psychology (3-0-0-3)**

Prerequisites: PSY 150

Corequisites: None

This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.

**PSY 285 Psychological Statistics (3-0-0-3)**

Prerequisites: PSY 150, MAT 161

Corequisites: None

This course introduces the study of descriptive and inferential statistics and their use in psychological research. Topics include measures of central tendency, variability and correlation, probability, sampling, hypothesis testing, and analysis of variance. Upon completion, students should be able to use statistical methods in the analysis of psychological data.



**PSY 292 Selected Topics in Psychology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

**PSY 293 Selected Topics in Psychology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

**Reading**

**RED 080 Intro to College Reading (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces effective reading and inferential thinking skills in preparation for RED 090. Emphasis is placed on vocabulary, comprehension, and reading strategies. Upon completion, students should be able to determine main ideas and supporting details, recognize basic patterns of organization, draw conclusions, and understand vocabulary in context.

**RED 090 Improved College Reading (3-2-0-4)**

Prerequisites: RED 080

or appropriate ASSET score

Corequisites: None

This course is designed to improve reading and critical thinking skills. Topics include vocabulary enhancement; extracting implied meaning; analyzing author's purpose, tone, and style; and drawing conclusions and responding to written material. Upon completion, students should be able to comprehend and analyze college-level reading material.

**RED 111 Crit Reading for College (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is designed to enhance critical reading skills. Topics include vocabulary enrichment, reading flexibility, metacognitive strategies, and advanced comprehension skills, including analysis and evaluation. Upon completion, students should be able to demonstrate comprehension and analysis and respond effectively to material across disciplines.

**Religion**

**REL 110 World Religions (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and

Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**REL 111 Eastern Religions (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the major Asian religious traditions. Topics include Hinduism, Buddhism, Taoism, Confucianism, and Shinto. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**REL 112 Western Religions (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the major western religious traditions. Topics include Zoroastrianism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**REL 198 Seminar in Religion (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

**REL 211 Intro to Old Testament (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**REL 212 Intro to New Testament (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course is a survey of the literature of first century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature. This course has been approved to satisfy the Comprehensive



Articulation Agreement general education core requirement in humanities/fine arts.

**REL 221 Religion in America (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course is an examination of religious beliefs and practice in the United States. Emphasis is placed on mainstream religious traditions and non-traditional religious movements from the Colonial period to the present. Upon completion, students should be able to recognize and appreciate the diversity of religious traditions in America. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**Science**

**SCI 110 Principles of Science (3-2-0-4)**

Prerequisites: None

Corequisites: None

This course introduces basic principles of chemistry, physics, and biology. Emphasis is placed on chemical reactions, energy forms, and ecological studies. Upon completion, students should be able to demonstrate mastery of the scientific method of thought and a basic understanding of chemistry, physics and biology.

**Sociology**

**SOC 100 Concepts in Sociology (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course examines the basic concepts of sociology from the perspective of the individual as a member of society. Topics include an understanding of society, culture, collective behavior, community life, social institutions, social change, and the effect of social life on human behavior. Upon completion, students should be able to demonstrate knowledge of the impact of social interaction on institutions, groups, and individuals.

**SOC 103 Family Living (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces various aspects of the contemporary American family and related intimate lifestyles. Topics include courtship, mate selection, marriage, parenting, sexuality, and family relationships. Upon completion, students should be able to identify practical issues and decisions relating to marriage and similar intimate relationships.

**SOC 105 Social Relationships (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course is designed to study social relations and human behavior in all aspects of society. Emphasis is placed on the individual in the family, educational setting, and workplace. Upon completion, students should be able to apply knowledge about human behavior to improve inter-personal and job effectiveness.

**SOC 210 Introduction to Sociology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

**SOC 213 Sociology of the Family (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

**SOC 215 Group Processes (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces group processes and dynamics. Emphasis is placed on small group experiences, roles and relationships within groups, communication, cooperation and conflict resolution, and managing diversity within and among groups. Upon completion, students should be able to demonstrate the knowledge and skills essential to analyze group interaction and to work effectively in a group context. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**SOC 220 Social Problems (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social behavioral sciences.

**SOC 225 Social Diversity (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course provides a comparison of diverse roles, interests, opportunities, contributions, and experiences in social life. Topics include race, ethnicity, gender, sexual orientation, class, and religion. Upon completion, students should be able to analyze how cultural and ethnic differences evolve and



how they affect personality development, values, and tolerance. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

### **SOC 230 Race and Ethnic Relations (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course includes an examination of the various aspects of race and ethnicity and how these lead to different experiences, opportunities, problems, and contributions. Topics include prejudice, discrimination, perceptions, myths, stereotypes; and inter-group relationships. Upon completion, students should be able to identify and analyze relationships among racial and ethnic groups within the larger society. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

### **SOC 240 Social Psychology (3-0-0-3)**

Prerequisites: RED 090

Corequisites: None

This course examines the influence of culture and social groups on individual behavior and personality. Emphasis is placed on the process of socialization, communication, conformity, deviance, interpersonal attraction, intimacy, race and ethnicity, small group experiences, and social movements. Upon completion, students should be able to identify and analyze cultural and social forces that influence the individual in a society. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

### **SOC 242 Sociology of Deviance (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an overview of deviant behavior and the processes involved in its definition, causation, prevention, control and treatment. Topics include theories of causation, social control, delinquency, victimization, criminality, the criminal justice system, punishment, rehabilitation, and restitution. Upon completion, students should be able to identify and analyze issues surrounding the nature and development of social responses to deviance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

## **Spanish**

### **SPA 110 Introduction to Spanish (2-0-0-2)**

Prerequisites: None

Corequisites: None

This course provides an introduction to understanding, speaking, reading, and writing Spanish. Emphasis is placed on pronunciation, parts of speech, communicative phrases, culture, and skills for language acquisition. Upon completion, students should be able to identify and apply basic grammar concepts, display cultural awareness, and communicate in simple phrases in Spanish.

### **SPA 111 Elementary Spanish I (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

### **SPA 112 Elementary Spanish II (3-0-0-3)**

Prerequisites: SPA 111

Corequisites: None

This course is a continuation of SPA III focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

### **SPA 120 Spanish for the Workplace (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course offers applied Spanish for the workplace to facilitate basic communication with people whose native language is Spanish. Emphasis is placed on oral communication and career-specific vocabulary that targets health, business, and/or public service professions. Upon completion, students should be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity.

### **SPA 141 Culture and Civilization (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course provides an opportunity to explore issues related to the Hispanic world. Topics include historical and current events, geography, and customs. Upon completion, students should be able to identify and discuss selected topics and cultural differences related to the Hispanic world.

### **SPA 151 Hispanic Literature (3-0-0-3)**

Prerequisites: ENG 111

Corequisites: None

This course includes selected readings by Hispanic writers. Topics include fictional and non-fictional works by representative authors from a variety of genres and literary periods. Upon completion, students should be able to analyze and discuss selected texts within relevant cultural and historical contexts. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.



**SPA 161 Cultural Immersion (2-3-0-3)**

Prerequisites: SPA 111

Corequisites: None

This course explores Hispanic culture through intensive study on campus and field experience in a host country or area. Topics include an overview of linguistic, historical, geographical, sociopolitical, economic, and/or artistic concerns of the area visited. Upon completion, students should be able to exhibit first-hand knowledge of issues pertinent to the host area and demonstrate understanding of cultural differences. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.

**SPA 211 Intermediate Spanish I (3-0-0-3)**

Prerequisites: SPA 112

Corequisites: None

This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**SPA 212 Intermediate Spanish II (3-0-0-3)**

Prerequisites: SPA 211

Corequisites: None

This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.

**Surveying****SRV 110 Surveying I (2-6-0-4)**

Prerequisites: EGR 115 and MAT 121

Corequisites: None

This course introduces the theory and practice of plane surveying. Topics include measuring distances and angles, differential and profile leveling, compass applications, topography, and mapping. Upon completion, students should be able to use/care for surveying instruments, demonstrate field note techniques, and apply the theory and practice of plane surveying.

**SRV 111 Surveying II (2-6-0-4)**

Prerequisites: SRV 110

Corequisites: None

This course introduces route surveying and roadway planning and layout. Topics include simple, compound, reverse, spiral, and vertical curves; geometric design and layout; planning of cross-section and grade line; drainage; earthwork calculations; and mass diagrams. Upon completion, students should be able to calculate and lay out highway

curves; prepare roadway plans, profiles, and sections; and perform slope staking.

**SRV 210 Surveying III (2-6-0-4)**

Prerequisites: SRV 110

Corequisites: None

This course introduces boundary surveying, land partitioning, and calculations of areas. Topics include advanced traverses and adjustments, preparation of survey documents, and other related topics. Upon completion, students should be able to research, survey, and map a boundary.

**SRV 220 Surveying Law (2-2-0-3)**

Prerequisites: SRV 110

Corequisites: None

This course introduces the law as related to the practice of surveying. Topics include surveyors' responsibilities, deed descriptions, title searches, eminent domain, easements, weight of evidence, riparian rights, and other related topics. Upon completion, students should be able to identify and apply the basic legal aspects associated with the practice of land surveying. Oral and written communications skills will be emphasized.

**SRV 230 Subdivision Planning (1-6-0-3)**

Prerequisites: SRV 111, SRV 210 and CIV 211

Corequisites: None

This course covers the planning aspects of residential subdivisions from analysis of owner and municipal requirements to plat layout and design. Topics include municipal codes, lot sizing, roads, incidental drainage, esthetic considerations, and other related topics. Upon completion, students should be able to prepare a set of subdivision plans.

**SRV 240 Topo/Site Surveying (2-6-0-4)**

Prerequisites: SRV 110

Corequisites: None

This course covers topographic, site, and construction surveying. Topics include topographic mapping, earthwork, site planning, construction staking, and other related topics. Upon completion, students should be able to prepare topographic maps and site plans and locate and stake out construction projects.

**SRV 250 Advanced Surveying (2-6-0-4)**

Prerequisites: SRV 111

Corequisites: None

This course covers advanced topics in surveying. Topics include photogrammetry, astronomical observations, coordinate systems, error theory, GPS, GIS, Public Land System, and other related topics. Upon completion, students should be able to apply advanced techniques to the solution of complex surveying problems.

**SRV 260 Field & Office Practices (1-3-0-2)**

Prerequisites: SRV 111

Corequisites: None

This course covers surveying project management, estimating, and responsibilities of surveying personnel. Topics include record-keeping, starting and operating a surveying business, contracts, regulations, taxes, personnel management, and profes-



sional ethics. Upon completion, students should be able to understand the requirements of operating a professional land surveying business.

## **Veterinary Medical Technology**

### **VET 110 Animal Breeds and Husbandry (2-2-0-3-)**

Prerequisites: None

Corequisites: None

This course provides a study of the individual breed characteristics and management techniques of the canine, feline, equine, bovine, porcine, ovine, caprine, and laboratory animals. Topics include physiological data, animal health management, and basic care and handling of animals. Upon completion, students should be able to identify breeds of domestic and laboratory animals, list physiological data, and outline basic care, handling, and management techniques.

### **VET 120 Vet Anatomy & Physiology (3-3-0-4)**

Prerequisites: VET 122

Corequisites: None

This course covers the structure and function of the animal body with emphasis on the similarities and differences among domestic animals. Emphasis is placed on the structure and function of the major physiological systems of domestic, laboratory, and zoo animals. Upon completion, students should be able to identify relevant anatomical structure and describe basic physiological processes for the major body systems.

### **VET 122 Veterinary Zoology (3-3-0-4)**

Prerequisites: None

Corequisites: None

This course introduces basic concepts and principles of biology including cell structure, metabolism, genetics, evolution, and ecology. Topics include anatomy and physiology, phylogeny, and taxonomy of the animal kingdom. Upon completion, students should be able to explain basic life processes and identify evolutionary relationships among members of the animal kingdom.

### **VET 123 Veterinary Parasitology (2-3-0-3)**

Prerequisites: None

Corequisites: None

This course covers the common internal and external parasites of companion animals, livestock, selected zoo animals, and wild animals. Emphasis is placed on laboratory diagnosis of the most common forms of the parasite through fecal, urine, skin, and blood exams. Upon completion, students should be able to identify common parasites and discuss life-cycles, treatment and prevention strategies, and public health aspects of veterinary parasitology.

### **VET 125 Veterinary Diseases I (2-0-0-2)**

Prerequisites: VET 120

Corequisites: None

This course introduces basic immunology, fundamentals of disease processes including inflammation, and common infectious diseases of animals and their prevention through immunization. Topics include fundamental disease processes, principles

of medical therapy, immunologic processes, infections and zoonotic diseases of domestic animals, and prevention of disease. Upon completion, students should be able to describe basic disease and immunological processes, recognize infections and zoonotic diseases, and discuss prevention strategies.

### **VET 126 Veterinary Diseases II (1-3-0-2)**

Prerequisites: VET 125

Corequisites: VET 191

This course is a continuation of VET 125 and includes the study of basic disease processes, fundamentals of pathology, and other selected topics of veterinary medicine. Topics include histopathology, pathologic changes associated with common diseases of animals, necropsy procedures, specimen handling, and other selected material. Upon completion, students should be able to describe basic pathologic changes associated with disease, recognize histopathologic changes, and properly perform collection and submission of necropsy specimens.

### **VET 131 Vet Lab Techniques I (2-3-0-3)**

Prerequisites: VET 123

Corequisites: VET 133

This course includes the fundamental study of hematology, hemostasis, and urinalysis. Emphasis is placed on basic hematology and urinalysis techniques, manual skill development, instrumentation, quality control, and applications to veterinary science. Upon completion, students should be able to perform manual and automated CBCs, hemostatic assays, and complete urinalyses and maintain laboratory equipment and quality control.

### **VET 133 VET Clinical Practice I (2-3-0-3)**

Prerequisites: None

Corequisites: VET 131, VET 120

This course introduces basic practices and techniques of the veterinary clinic and biomedical research fields for dogs, cats, and laboratory animals. Topics include physical exam, husbandry, housing, sanitation, restraint and handling, administration of medications, anesthesia and euthanasia techniques, grooming, and dentistry. Upon completion, students should be able to properly restrain, medicate, examine, groom, and maintain each of the species studied.

### **VET 137 Vet Office Practices (1-2-0-2)**

Prerequisites: None

Corequisites: None

This course is designed to teach basic administrative techniques, client communication skills, and regulations pertaining to veterinary medicine. Topics include record keeping, telephone techniques, professional liability, office procedures, state and national regulatory laws, human relations, and animal welfare. Upon completion, students should be able to demonstrate effective communication techniques, office procedures, and knowledge of regulatory laws and issues relating to animal welfare. Additional studies will emphasize the use of computers and software in veterinary practice management.



**VET 211 Vet Lab Techniques II (2-3-0-3)**

Prerequisites: VET 131

Corequisites: VET 213

This course covers advanced hematology, serology, immunology, and clinical chemistry. Topics include advanced hematologic, serologic, and immunologic test procedures: manual and automated clinical chemistry procedures: laboratory safety: and quality control. Upon completion, students should be able to collect, prepare, and analyze serum and plasma samples and outline quality control and safety procedures.

**VET 212 Vet Lab Techniques III (2-3-0-3)**

Prerequisites: VET 211

Corequisites: VET 214

This course introduces the basic principles of microbiology, histology, and cytology. Emphasis is placed on collection of microbiological samples for culture and sensitivity and collection and preparation of samples for histological and cytological examination. Upon completion, students should be able to perform microbiological culture and sensitivity and evaluate cytology and histology specimens.

**VET 213 VET Clinical Practice II (1-9-0-4)**

Prerequisites: VET 133

Corequisites: None

This course covers basic radiography, anesthesia techniques, dentistry, sample collection and handling, surgical assistance and instrumentation, sterile techniques, and patient record keeping. Topics include basic radiography, injectable and gas anesthesia, dentistry, instrument identification and care, sterile surgical technique, specimen collection and processing, and maintenance of patient records. Upon completion, students should be able to take and process radiographs, administer and monitor anesthesia, assist in surgical procedures, collect specimens, and maintain surgical records. Students will continue to gain proficiency in the use of veterinary computer software programs for record keeping, inventory management, and practice economics.

**VET 214 VET Clinical Practice III (1-9-0-4)**

Prerequisites: VET 213

Corequisites: None

This course covers advanced anesthetic techniques, special radiographic techniques, advanced dentistry, sample collection and processing, bandaging, and emergency and critical care procedures. Topics include induction and maintenance of anesthesia, radiographic contrast studies, advanced dentistry, external coaptation, intensive care procedures, and advanced sample collection techniques. Upon completion, students should be able to demonstrate proficiency in sample collection, radiology, anesthesia, critical care and emergency procedures, and dentistry. Students will continue to gain proficiency in the use of veterinary computer software applications for patient record keeping, inventory management, and practice economics.

**VET 215 Veterinary Pharmacology (3-0-0-3)**

Prerequisites: CHM 130, CHM 130A

Corequisites: VET 213

This course introduces drugs and other substances utilized in veterinary medicine. Emphasis is placed

on drug classification and methods of action, administration, effects and side effects, storing and handling of drugs, and dosage calculations. Upon completion, students should be able to properly calculate and administer medications, recognize adverse reactions, and maintain pharmaceutical inventory and administration records. Students will demonstrate math competencies in algebraic computations necessary to successfully calculate drug dosages and perform conversions to the metric system.

**VET 217 Large Animal Clin Pract (2-3-0-3)**

Prerequisites: VET 120

Corequisites: VET 213

This course covers topics relevant to the medical and surgical techniques for the common domestic large animal species. Topics include physical exam, restraint, sample collection, bandaging, emergency treatment, surgical and obstetrical procedures and instruments, herd health, and lameness topics. Upon completion, students should be able to safely perform restraint, examination, and sample collection; assist surgical, obstetrical, and emergency procedures; and discuss herd health.

**VET 237 Animal Nutrition (3-0-0-3)**

Prerequisites: None

Corequisites: None

This course covers the principles of nutrition and their application to feeding practices of domestic, farm, and companion animals. Topics include basic nutrients and nutritional needs of individual species, proximate analysis, interpretation of food and feed labels, types of animal foods, and ration formulation. Upon completion, students should be able to select appropriate diets for animals in various stages of health and disease, analyze nutrition labels, and identify foods.

**Welding****WLD 110 Cutting Processes (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness. This course also introduces the oxy-fuel welding and brazing processes.

**WLD 112 Basic Welding Processes (1-3-0-2)**

Prerequisites: None

Corequisites: None

This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.



**WLD 115 SMAW (Stick) Plate (2-9-0-5)**

Prerequisites: None

Corequisites: None

This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes. This course also introduces the concepts of welding metallurgy.

**WLD 116 SMAW (Stick) Plate/Pipe (1-9-0-4)**

Prerequisites: WLD 115

Corequisites: None

This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions. This course also includes the knowledge and skills that apply to welding pipe.

**WLD 121 GMAW (MIG) FCAW/Plate**

Prerequisites: None

Corequisites: None

This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions. This course also introduces TIG welding.

**WLD 131 GTAW (TIG) Plate (2-6-0-4)**

Prerequisites: None

Corequisites: None

This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of

tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials. This course also introduces GTAW on pipe.

**WLD 141 Symbols & Specifications (2-2-0-3)**

Prerequisites: None

Corequisites: None

This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

**WLD 151 Fabrication I (2-6-0-4)**

Prerequisites: WLD 110, WLD 115, WLD 116, WLD 131

Corequisites: None

This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment. Student will also be able to fabricate projects.

**WLD 261 Certification Practices (2-6-0-4)**

Prerequisites: WLD 115, WLD 121, VV-LD 131

Corequisites: None

This course covers certification requirements for industrial welding processes. Topics include techniques and certification requirements for prequalified joint geometry. Upon completion, students should be able to perform welds on carbon steel plate and/or pipe according to applicable codes.

**Zoology - See Biology**



**Gaston College**  
Opportunities for Life





2001 - 2003

FACULTY AND STAFF



# Faculty and Staff of Gaston College

<b>Adams, Barbara H.</b> Administrative Assistant to Vice President for Student Services A.A.S., Gaston College	1986	<b>Beam, Wade</b> Lead Trainer, Adult High School B.A., Belmont Abbey College M.S., NC A&T State University	1996
<b>Adams, Kathie (RN)</b> Instructor, Nursing Assistant Program A.D.N., Forsyth Technical College	1995	<b>Bean, Judy K.</b> Recruiter, Life Skills B.A., Sacred Heart College B.S.W., Livingstone College	1992
<b>Adkins, Carrietta</b> Vice President, Student Services B.S., East Carolina University M. Ed., UNC-Charlotte Ph.D., University of Texas	1997	<b>Beaty, Billy</b> Preventive Maintenance Technician	2001
<b>Albright, Laura Goodson</b> Instructor, English B.A., UNC-Chapel Hill M.S., Radford University	1998	<b>Beebe, Julie</b> Secretary, Health Sciences, Lincoln Campus, (Part-Time) A.A.S., Tompkins-Cortland	1999
<b>Al-Nasra, Moayyad M. (P.E., CPESC)</b> Chair, Civil Engineering Technology B.Sc., M.Sc., Yarmouk University Ph.D., Old Dominion University	1992	<b>Bell, Collar</b> Public Services Assistant, Morris Library (Part-Time) A.A.S., Gaston College	2000
<b>Ammons, Don</b> Vice President for Academic Affairs B.S., Defiance College M. Ed., Ph.D., University of Toledo	2001	<b>Bennett, Thomas S.</b> Instructor, Business Administration B.S., Appalachian State University M.Ed., UNC-Charlotte	1975
<b>Angeles, Orlando</b> Director, Facilities Management B.S., Mapua Institute of Technology	1998	<b>Blankenship, Judy</b> Chair, Health Promotion B.C.A., UNC-Charlotte M.A., Gardner-Webb University	2000
<b>Argent, Joseph</b> Instructor, English B.A., M.A., East Carolina University Ph.D., UNC-Greensboro	1996	<b>Blankenship, Kristine</b> Instructor, Veterinary Technology Program D.V.M., Ohio State University	1998
<b>Armstrong, Melissa M.</b> Instructor, Chemistry B.S., Davidson College Ph.D., University of Tennessee	1991	<b>Blanton, Robert A.</b> Chair, Social/Behavioral Sciences A.A., Mars Hill College B.S., M.A., Appalachian State University	1969
<b>Arthurs, Janet B. (R.N.)</b> Instructor, Nursing B.S.N., UNC-Chapel Hill M.S.N., UNC-Greensboro	1983	<b>Blount, Ross</b> Instructor, Sociology B.A., Psychology M.S., Sociology	2000
<b>Attaway, Victoria</b> Continuing Education Registration Specialist A.A.S., Gaston College	1999	<b>Bradley, Lois B. (R.N.)</b> Chair, Nursing B.S.N., Lenoir-Rhyne M.Ed., UNC-Charlotte	1981
<b>Bajorek, Sylvia</b> Executive Director, Foundation/Resource Development B.A., Winthrop University	1997	<b>Brooks, Cindy</b> Accounts Receivable Specialist A.A.S., Gaston College	1993
<b>Ballard, David</b> Custodian	1996	<b>Broome, Tonia</b> Instructor, Math B.A., M.A., UNC-Charlotte	1996
<b>Bambach, William J.</b> Trainer, Employment Readiness Program B.A., Belmont Abbey College M.A., UNC-Chapel Hill	1976	<b>Brown, Gail</b> Secretary, Criminal Justice Academy/BLET	1998
<b>Barrett-Ray, Linda F.</b> Shipping/Receiving Assistant A.A.S., Gaston College	1993	<b>Brown, Pearl M.</b> Public Services Librarian B.S., M.L.S., N.C. Central University Ed.D., Nova University	1966
<b>Beam, Marie Annette</b> Teacher, Early Childhood Development Center	1999	<b>Bruce, Joy F. (CPA, CFE)</b> Instructor, Accounting B.A., North Carolina State University M.S., Appalachian State University	1992

<b>Bumgarner, Lisa</b> Public Information Specialist A.A.S., Isothermal Community College	<b>2001</b>	<b>Cooke, Linda H.</b> Secretary, Cooperative Education & Student Employment A.A., Gaston College	<b>1979</b>
<b>Burgin, William L., Jr.</b> Chair, Mathematics B.A., M.A., UNC-Charlotte	<b>1991</b>	<b>Cooke, Ronald P.</b> Chair, Industrial Maintenance Technology A.A., Gaston College B.S., Western Carolina University	<b>1985</b>
<b>Butts, Patricia M.</b> Bookstore Assistant	<b>1993</b>	<b>Cope, Theresa</b> Teacher, Early Childhood Development Center (Part-Time) A.A.S., Gaston College	<b>2001</b>
<b>Byers, Darlene M.</b> Secretary, Institutional Effectiveness B.A., Johnson C. Smith University	<b>1989</b>	<b>Cox, Virgil G.</b> Dean, Industrial, Engineering & Information Technologies B.S., M.S.E.E., Massachusetts Institute of Technology Ocean Engineer, Massachusetts Institute of Technology	<b>1987</b>
<b>Cagle, Joe N.</b> Chair, Criminal Justice & Paralegal B.A., Olivet College J.D., Wake Forest University M.A., Goddard College LL.M., University of Mississippi	<b>1993</b>	<b>Crane, Duane H.</b> Chair, Science B.S., North Carolina State University M.A., Eastern Michigan University M.A., UNC-Charlotte	<b>1994</b>
<b>Cameron, Edgar M.</b> Instructor, Electrical/Electronics Technology (Physics) A.A.S., Gaston College B.S., Western Carolina University	<b>1976</b>	<b>Creed, Natalie M.</b> Instructor, Mathematics B.S., N.C. Central University M.A., University of Michigan	<b>1995</b>
<b>Cantrell, James</b> Network Manager A.A.S., Gaston College	<b>2000</b>	<b>Crow, Kay T.</b> Administrative Assistant to Vice President for Academic Affairs Georgia Southern University	<b>1989</b>
<b>Carpenter, Faye</b> Custodian	<b>1999</b>	<b>Davidson, Olivia</b> Secretary, Early Childhood Development Center A.A., Mitchell College	<b>1997</b>
<b>Casey, Michael</b> Instructor, Biology B.A., Carson-Newman College M.A., Appalachian State University	<b>2000</b>	<b>Davis, Ann</b> Secretary RESTC/Fire Protection and Rescue Training	<b>1996</b>
<b>Chaffin, Troy F.</b> Instructor, Developmental Mathematics B.A., University of Florida	<b>1974</b>	<b>Davis, Beverly A. (R.N.)</b> Chair, Practical Nursing, Lincoln Campus B.S.N., Lenoir-Rhyne College	<b>1988</b>
<b>Chambers, Allen</b> Director, Life Skills B.A., M.Ed., Auburn University	<b>1996</b>	<b>Davis, Louise B.</b> Secretary, Student Services Gaston College	<b>1999</b>
<b>Childers, Raphonza (R.N.)</b> Instructor, Practical Nursing A.A.S., Gaston College B.S.N., UNC-Charlotte	<b>2000</b>	<b>Day-Lowe, Sharon</b> Technical Services Specialist, Library A.A., Gaston College B.S., Appalachian State University	<b>1999</b>
<b>Clay, Rex</b> Director, Institutional Effectiveness B.S., Marshall University M.A., UNC - Chapel Hill Ed.D., North Carolina State University	<b>1995</b>	<b>Dedmon, Paula H.</b> Instructor, Biology B.S., M.A., Winthrop University	<b>1991</b>
<b>Clayton, Joanne</b> Instructor, Sociology B.A., UNC-Wilmington M.S., Virginia Polytechnic Institute & State University	<b>2001</b>	<b>Dellinger, Amy L.</b> Accounting Assistant/ Accounts Payable A.A.S., Cleveland Community College	<b>1997</b>
<b>Clemmer, Mary G.</b> Instructor, Information Technologies A.B., Lenoir-Rhyne College	<b>1982</b>	<b>Dellinger, Dewey D.</b> Dean, Liberal Arts and Sciences B.S., N.C. State University M.A., UNC-Charlotte Ph.D., N.C. State University	<b>1990</b>
<b>Cloninger, Michael</b> Chair, Automotive Technology A.A.S., Gaston College B.S., Western Carolina University	<b>1995</b>	<b>Dellinger, Michael</b> Grounds Technician	<b>1999</b>
<b>Cole, Richard M.</b> Audiovisual Specialist B.S., M.A., Appalachian State University	<b>1978</b>	<b>Denton, Carol</b> Human Resources Specialist A.A., Gaston College B.A., Sacred Heart College	<b>1998</b>



<b>Depew, Beth</b> Secretary, Human Resources	<b>1999</b>	<b>Ford, Landon</b> Instructor, Information Technologies A.B., Lenoir Rhyne College	<b>1999</b>
<b>DiBartolo, Brian</b> Instructor, Geography & Earth Sciences B.S., James Madison University M.S., University of Tennessee	<b>2000</b>	<b>Foster, Peggy S.</b> Director, Human Resources A.A.S., Piedmont Technical College B.S., Limestone College M.P.A. UNC-Charlotte	<b>1988</b>
<b>Domenico, Elizabeth W.</b> Instructor, Business Administration B.S., Rider College M.S., Temple University	<b>1971</b>	<b>Fowler, Kelly</b> Instructor, Mathematics B.S., M.A., Appalachian State University	<b>1996</b>
<b>Dotson, Kathy H.</b> System Administrator/Computer Programmer, Technology Services A.A.S., Gaston College B.S., Gardner-Webb University	<b>1989</b>	<b>Freeman, Gary W.</b> Chair, Art B.S., M.A., East Carolina University	<b>1982</b>
<b>Duncan, Jane (R.N.)</b> Chair, Nursing Assistant Program B.S.N., University of S.C. at Columbia	<b>1992</b>	<b>Freeman, Karen Q.</b> Teacher, Early Childhood Development Center A.A.S., Gaston College	<b>1984</b>
<b>Duncan, Karen</b> Chair, Office Systems Technology B.S., UNC-Charlotte	<b>1999</b>	<b>Froneberger, Dornessa</b> Plant Operations Facilitator	<b>2000</b>
<b>Dunn, Deborah F.</b> Coordinator, Basic Skills B.A., UNC-Charlotte M.S., NC A&T State University	<b>1994</b>	<b>Fugate, Frances</b> Counselor, Lincoln Campus B.A., University of Florida M. Ed., University of Central Florida	<b>2001</b>
<b>Ellington, Barbara</b> Instructor, English B.A., M.A., UNC-Charlotte	<b>1996</b>	<b>Galant, Lawrence L.</b> Instructor, Psychology B.S., Fairleigh Dickinson University M.Ed., Pennsylvania State University Ph.D., UNC-Greensboro	<b>1970</b>
<b>Elliott, Carol M.</b> Administrative Assistant, Lincoln Campus A.A.S., Gaston College	<b>1991</b>	<b>Galloway, June R.</b> Teacher, Early Childhood Development Center A.A.S., Gaston College	<b>1987</b>
<b>Ellis, Rebecca</b> Custodian	<b>1989</b>	<b>Garvin, Betty B.</b> Instructor, Medical Assisting A.A.S., Gaston College B.T., Appalachian State University	<b>1988</b>
<b>English, Donna</b> Instructor, Architectural & Mechanical Drafting Technology A.A., A.A.S., Isothermal Community College B.S., Western Carolina University	<b>1995</b>	<b>Gelsinger, Kimberly</b> Director, Distance Education B.S., UNC-Chapel Hill	<b>1999</b>
<b>Erickson, John</b> Coordinator, Learning Center B.A., M.A., UNC-Charlotte	<b>1998</b>	<b>George, Dianne (R.N.)</b> Instructor, Nursing B.S.N., M.S.N., UNC-Charlotte	<b>1996</b>
<b>Esselman, Bernadette</b> Instructor, Reading B.S., M.Ed., Columbus State University	<b>2000</b>	<b>Gill, Pamela A.</b> Instructor, Foreign Languages A.B., Duke University M.A., Ph.D., UNC-Chapel Hill	<b>1992</b>
<b>Falls, Brenda L.</b> Instructor, Office Systems Technology B.S., M.A., Ed.S., Winthrop University	<b>1973</b>	<b>Goines, Barbara C. (R.N.)</b> Instructor, Nursing B.S.N., Winston-Salem State University	<b>1975</b>
<b>Falls, Janis M.</b> Learning Center Specialist, Lincoln Campus B.S., Western Carolina M.A., UNC-Greensboro	<b>1998</b>	<b>Green, Mary J. (CPA)</b> Instructor, Accounting A.S., Columbia State University B.S., University of South Carolina	<b>1999</b>
<b>Finch, John</b> Shipping & Receiving Supervisor A.B., Belmont-Abbey College M.P.A., N.C. State University	<b>2000</b>	<b>Greene, Vicki K.</b> Admissions Specialist A.A.S., Gaston College	<b>1991</b>
<b>Fisher, Patricia</b> Teacher, Early Childhood Development Center	<b>1997</b>	<b>Greer, Linda L.</b> Dean, Continuing Education B.S., M.Ed., Indiana University of PA Ed.D., Nova Southeastern University	<b>1992</b>
<b>Ford, Jason W.</b> Distance Education Specialist A.A. Art Institute of Atlanta	<b>1999</b>		

<b>Gregory, Alfred L.</b> Auditorium Technician/Housekeeping Supervisor	1986	<b>Hollars, Elizabeth</b> Director, Community Education B.A., M.Ed., UNC-Charlotte	2000
<b>Griffin, Joanne</b> Accounting Specialist	1997	<b>Hooper, Sonya</b> Custodian	2000
<b>Griffin, Renee</b> Printing Assistant (Part-Time)	2001	<b>Hopper, Alice D.</b> Admissions Specialist	1978
<b>Grimsley, Clifford</b> Instructor, Science B.S., Francis Marion University M.A., Belmont Abbey College	1998	<b>Hopper, Nancy P.</b> Coordinator, Continuing Education Registration A.A.S., Gaston College B.S., Gardner-Webb University	1986
<b>Guerra, Dee</b> Secretary, Arts & Sciences	1999	<b>Horton, Jeannie</b> Payroll Specialist A.A.S., Gaston College	1998
<b>Gunnell, Juanita</b> Chair, Dietetic Technician B.S., UNC-Greensboro M.S., Winthrop University	1999	<b>Houser, Emily G.</b> Continuing Education Auditor A.A.S., Gaston College	1999
<b>Gunter, Ruby</b> Teacher, Early Childhood Development Center	1998	<b>Hoyle, Gail</b> Secretary, Community Education, Lincoln Campus	1993
<b>Hall, Steve R.</b> Supervisor, Systems Planning & Maintenance Diploma, H.V.A.C., Gaston College	1991	<b>Hoyle, Sandra F.</b> Administrative Assistant, Engineering & Information Technologies	1972
<b>Hambright, Myers T.</b> Instructor, Electronics Engineering Technology B.A., Elon College M.B.A., Winthrop University	1974	<b>Hudson, Michelle</b> Printing Assistant	1998
<b>Hamby, Martha B.</b> Buyer/Purchasing Agent	1987	<b>Huss, Jennifer M.</b> Administrative Assistant to Vice President for Finance, Operations, & Facilities B.S., B.A., Western Carolina University	1997
<b>Hamilton, Sandy</b> Secretary, Community Education A.A.S., Gaston College	1994	<b>Jackson, DeRee G.</b> Coordinator, Adult High School B.S., Belmont Abbey College	1998
<b>Hanie, Elizabeth</b> Chair, Veterinary Technology B.S.A., D.V.M., University of Georgia M.S., Virginia Polytechnic Institute	1995	<b>Jackson, Glenda S.</b> Instructor, Reading B.S., Appalachian State University M.H.D.L., UNC-Charlotte	1991
<b>Hayes, Anne Marie</b> Instructor, Criminal Justice B.S., Guilford College J.D., Case Western Reserve University School of Law	1996	<b>Jenkins, Karen</b> Administrative Assistant, Business A.A.S., Gaston College	1997
<b>Heavner, Linda</b> Secretary, Life Skills A.A.S., Gaston College	1998	<b>Jimison, Louise</b> Instructor, Early Childhood Education B.A., Sacred Heart College M.S., North Carolina A & T State University	2000
<b>Hegenbart, Alex F.</b> Chair, Music B.A., S.M.H. at Amsterdam M.M., Amsterdam Conservatory of Music	1979	<b>Jones, Betsy H.</b> Instructor, Information Technologies/Webmaster A.A.S., Gaston College B.S., Gardner-Webb University	1979
<b>Hendricks, George</b> Chair, Electronics Engineering Technology (Physics) A.A.S., Community College of the Airforce B.S., University of New Mexico M.E., University of Florida	2000	<b>Jones, Jo Ann S.</b> Instructor, Office Systems Technology B.S., MacMurray College M.A., East Carolina University	1989
<b>High, Lora A.</b> Secretary, Small Business Center/Community Education A.A., Gardner-Webb University	1988	<b>Jones, Mary Elizabeth (R.N.)</b> Chair, Medical Assisting & Phlebotomy B.S.N., University of South Carolina M.A., Central Michigan University	1978
<b>High, Randy</b> Director of Safety/Chief of Campus Police A.A., Gaston College B.S., UNC-Charlotte	1994	<b>Keener, Laura B.</b> Teacher, Early Childhood Development Center A.A.S., Gaston College	1988
<b>Holcombe, Anna C.</b> Teacher, Early Childhood Development Center B.A., Sacred Heart College	1995		



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<b>Kincaid, Brenda</b> Director, Cooperative Education & Student Employment B.A., UNC-Charlotte	<b>1974</b>	<b>McCrary, Harold</b> Custodian	<b>1997</b>
<b>King, Belinda</b> Instructor, Medical Assisting A.A.S., Gaston College	<b>1996</b>	<b>McCrary, Nellie R.</b> Chair, Languages and Literature B.S., M.Ed., Livingston University Ph.D., University of Alabama	<b>1972</b>
<b>Kirby, James</b> Security Officer A.A., Gaston College	<b>2000</b>	<b>McCullough, Alicia</b> Instructor, English B.A., Hampton University M.A., UNC-Charlotte	<b>1993</b>
<b>Kiser, Rebecca E.</b> Instructor, Office Systems Technology A.A.S., Cleveland Community College B.T., M.A., Appalachian State University	<b>1989</b>	<b>McGinnis, Heidimarie</b> Accountant A.A.S., Gaston College	<b>1987</b>
<b>Knight, Al</b> Instructor, Information Technologies B.S., Gardner-Webb University	<b>1996</b>	<b>McLaurin, Daniel</b> Maintenance Technician Diploma, (Industrial Maintenance) Diploma (Industrial Electronics) A. A. (General Technology), York Technical College	<b>2000</b>
<b>Lackey, Keith F. (R.L.S.)</b> Instructor, Civil Engineering Technology A.A.S., Gaston College B.S., North Carolina State University	<b>1982</b>	<b>Metcalf, Lori</b> Instructor, Psychology B.A., UNC-Asheville M.A., East Carolina University	<b>2000</b>
<b>Laux, Brenda</b> Custodian	<b>2000</b>	<b>Metts, Clarissa</b> Bookstore/Student Services Assistant A.A.S., Accounting, Gaston College A.A.S., Bus. Admin., Gaston College	<b>1999</b>
<b>Ledford, Mike</b> Supervisor, Grounds	<b>2000</b>	<b>Michael-Pickett, Stephanie</b> Director, Marketing, Public Relations & Radio B.A., Drake University M.A., University of Portland	<b>1998</b>
<b>Lev, Anat</b> Instructor, Biology B.S.C., M.S.N., Biology, Ben-Gurion University Ph.D., BioChemistry, Ben-Gurion University	<b>1999</b>	<b>Millen, Mack</b> Preventive Maintenance Technician	<b>1997</b>
<b>Lienhart, Dale A.</b> Computer Operator/Communications Specialist A.S., Gaston College B.A., Belmont Abbey College	<b>1984</b>	<b>Miller, James P.</b> Custodian	<b>1988</b>
<b>Looney, T. Gene</b> Registration/Records Specialist, (Part-Time) B.F.A., University of Texas	<b>1988</b>	<b>Miller, Richard L.</b> Vice President for Finance, Operations, & Facilities B.S., M.B.A., The American University, Washington, DC	<b>1996</b>
<b>Lucas, Sandra</b> Accounting Specialist/Equipment Coordinator A.A.S., Gaston College	<b>1999</b>	<b>Mintz, Annette W.</b> Public Services Specialist, Library North Carolina Central University	<b>1978</b>
<b>Lukach, Barbara</b> Faculty Secretary, Health Sciences	<b>1999</b>	<b>Monaco, Robert</b> Campus Police Officer A.A., Gaston College	<b>1997</b>
<b>Lutz, Stephanie</b> Receptionist/Secretary, Human Resources	<b>2000</b>	<b>Monroe, Syvana</b> Registration & Records Specialist A.A.S., Gaston College	<b>2000</b>
<b>Lynch, Lucinda F.</b> Financial Aid Specialist	<b>1978</b>	<b>Morrow, Laurel</b> HRD Coordinator A.A., Isothermal Community College B.S., Appalachian State University	<b>2000</b>
<b>Mabry, Douglas S.</b> Chair, Air Conditioning, Heating, & Refrigeration Diploma HVAC, Cleveland Community College	<b>1991</b>	<b>Morton, Mary D.</b> Instructor, Philosophy B.A., M.A., University of South Carolina M.A., Ph.D., Vanderbilt University	<b>1993</b>
<b>Martin, Franklin E.</b> Instructor, Air Conditioning, Heating & Refrigeration B.S., Western Carolina University	<b>1983</b>		
<b>Mason, William</b> Custodian	<b>1999</b>		

<b>Navey, Linda H.</b> Administrative Assistant to the President A.A.S., Gaston College	<b>1972</b>	<b>Poteat, Teresa J.</b> Chief GED Examiner, Life Skills A.A., Gaston College B.S., Gardner-Webb University	<b>1984</b>
<b>Neal, Paula</b> Secretary, Institutional Effectiveness	<b>1997</b>	<b>Powell, Lisa</b> Bookstore Assistant A.A.S., Gaston College	<b>1999</b>
<b>Nichols, Sharon M.</b> Instructor, English B.A., M.A., UNC-Charlotte	<b>1979</b>	<b>Powell, Michael</b> Instructor, English B.A., Western Carolina University M.A., Winthrop University	<b>2000</b>
<b>Norman, Dana</b> Custodian	<b>1995</b>	<b>Preston, Lynn</b> Director, Student Records & Registration B.A., Belmont Abbey College	<b>2000</b>
<b>Nortey, Thomas D.</b> Chair, Mechanical Engineering Technology B.S.M.E., University of Science & Technology M.S.M.E., University of Massachusetts	<b>1993</b>	<b>Propst, Tonya</b> Secretary, Life Skills, Lincoln Campus A.A.S., Gaston College	<b>1999</b>
<b>Oates, Peggy V.</b> Director, Financial Aid and Veterans Affairs B.S., M.B.A., Gardner-Webb University	<b>1994</b>	<b>Puckett, Paul</b> Instructor, Math B.S., Appalachian State University	<b>2001</b>
<b>Pane, Michael</b> Instructor, Developmental English B.A., M.A., University of Montana	<b>2000</b>	<b>Queen, Patsy S. (R.N.)</b> Instructor, Nursing B.S.Ed., B.S.N., Western Carolina University M.S.N., University of Texas at Austin	<b>1989</b>
<b>Patterson, Kim</b> Gardner/Grounds Technician	<b>1997</b>	<b>Randleman, J. Michael</b> Instructor, Criminal Justice & Paralegal A.A., Mars Hill College B.A., J.D., Wake Forest University	<b>1994</b>
<b>Patterson, Nancy</b> Secretary-Marketing, Public Relations & Radio A.S., Kings College	<b>1999</b>	<b>Raymond, Thomas T. (P.E.)</b> Chair, Industrial Engineering Technology & Industrial Mgmt. Technology B.S.I.E., University of Florida M.B.A., University of Kentucky	<b>1993</b>
<b>Patterson, Robert W.</b> Lead Maintenance Technician	<b>1982</b>	<b>Rayne, Tracy W.</b> Accountant B.S., Meredith College M.S., Appalachian State University	<b>1996</b>
<b>Patton, Tamara</b> Instructor, Foreign Language B.A., M.A., UNC-Greensboro	<b>1999</b>	<b>Reid, Amy</b> Teacher, Early Childhood Development Center	<b>2000</b>
<b>Pauley, Linc</b> Instructor, Information Technologies A.A., Gaston College B.S., Wayland Baptist University	<b>2000</b>	<b>Rhom, Eric</b> Instructor, Automotive Technology A.A., Gaston College B.A., UNC-Charlotte	<b>1998</b>
<b>Payne, Julia Lee</b> Secretary, Emergency Medical Services, (Part-Time) B.S., Gardner-Webb University	<b>2000</b>	<b>Rhyne, Irma</b> Registration & Records Specialist	<b>1990</b>
<b>Payseur, Delores</b> Lead Trainer, Basic Skills, Lincoln Campus B.S., Gardner-Webb University	<b>1996</b>	<b>Richardson, Michelle</b> Director, Early Childhood Development Center B. S., Western Carolina University	<b>2000</b>
<b>Pendleton, Ronnie L.</b> Plumber Vocational Diploma, Gaston College	<b>1995</b>	<b>Richey, Bobbee</b> Secretary, Corporate Education	<b>1996</b>
<b>Penley, Kandy D.</b> Secretary, Medical Assisting, Phlebotomy, & Vet Tech A.A.S., Gaston College	<b>1980</b>	<b>Rivelle, Dale</b> Alternate GED Examiner, Life Skills A.A., Gaston College B.S., Gardner-Webb University	<b>2000</b>
<b>Pettis, Charles</b> Custodian	<b>1986</b>	<b>Rivers, Brad</b> Director, Small Business Center B.S., NC State University M.B.A., UNC-Greensboro	<b>1999</b>
<b>Pittman, David</b> Coordinator, Computer Training Institute B.A., Sacred Heart College M.B.A., Gardner-Webb University	<b>1999</b>		
<b>Platt, Marilyn G.</b> Chair, Developmental Education B.A., M.A., UNC-Charlotte Developmental Specialist, ASU	<b>1991</b>		



<b>Rivers, Peggy</b> Instructor, Art B.A., M.A., Humboldt State University M.F.A., Columbia University	<b>2000</b>	<b>Shook, Brian</b> Admissions Specialist B.A., Belmont Abbey College	<b>1997</b>
<b>Roberson, Kathryn W.</b> Instructor, English B.A., M.A., UNC-Charlotte	<b>1972</b>	<b>Shook, Donna T.</b> Secretary, Technology Services A.A.S., Gaston College	<b>1986</b>
<b>Robertson, James G.</b> Chair, Business Administration B.S., M.S., Pennsylvania State University	<b>1974</b>	<b>Sigal, Marvin</b> Instructor, Biology M.S., Wright State University B.S., Ph.D., The Ohio State University	<b>1992</b>
<b>Robertson, Nicole</b> Coordinator, Library Services, Lincoln Campus B.A., Guilford College M.L.I.S., UNC-Greensboro	<b>1999</b>	<b>Sigmon, Deborah S.</b> Administrative Assistant, Continuing Education A.A.S., Gaston College	<b>1997</b>
<b>Robinson, Martha A.</b> Secretary/Technician, Library A.A.S., Brevard Junior College	<b>1992</b>	<b>Simpson, Jerry</b> Director, Counseling A.A., B.A., Gardner-Webb University M. Ed., UNC-Greensboro	<b>1999</b>
<b>Ross, Jayne B.</b> Chair, Architectural & Mechanical Drafting Technology A.A.S., Central Piedmont Community College B.S., Western Carolina University	<b>1986</b>	<b>Sisk, James (C.P.I.M.)</b> Director, Corporate Education B.A., Dallas Baptist University M.S., Florida Institute of Technology	<b>1996</b>
<b>Rudisill, Brenda</b> Cook, Early Childhood Development Center	<b>2000</b>	<b>Skinner, Patricia A.</b> President A.A., Lake Michigan College B.S., Western Michigan University M.A., Western Michigan University S.A., Western Michigan University Ph.D., The Ohio State University	<b>1994</b>
<b>Ruff, Abraham</b> Network/PC Support Specialist A.A.S., Gaston College A.A.S., Cleveland Community College	<b>1997</b>	<b>Smith, Krista</b> Instructor, Early Childhood Development Center	<b>1997</b>
<b>Russell, Anita</b> Teacher, Early Childhood Development Center A.A., Catawba Valley Community College B.S., Western Carolina University	<b>2000</b>	<b>Smith, Lynn R.</b> Administrative Assistant, Arts & Sciences A.S.S., Lenoir Community College B.S., Gardner Webb University	<b>1995</b>
<b>Sahms, Patricia M.</b> Director, Printing/Mailroom	<b>1980</b>	<b>Smith, Martha Y.</b> Administrative Assistant, Industrial Technologies B.A., Central Wesleyan College	<b>1984</b>
<b>Sanders, Patricia A. (R.N.)</b> Instructor, Nursing B.S.N., Weber State University M.S.N., UNC-Greensboro	<b>1993</b>	<b>Smith, Paula</b> Instructor, Art B.F.A., Kansas City Art Institute M.F.A., University of Illinois	<b>2000</b>
<b>Scott, Kathy L.</b> Veterans Affairs & Financial Aid Specialist	<b>1974</b>	<b>Smith, Sherry J.</b> Supervisor, Business Office, Lincoln Campus B.S.B.A., UNC-Greensboro	<b>1987</b>
<b>Sellers, H. Duane</b> HVAC Technician Diploma, Gaston College	<b>1995</b>	<b>Spitler, Kent</b> Director, EMS A.A.S., Clark Technical College B.S., Park College M.S. Ed., University of Dayton	<b>2001</b>
<b>Sexton, Lawrence D.</b> Instructor, Developmental English B.A., Brooklyn College Developmental Specialist, ASU	<b>1989</b>	<b>Sprinkle, Elizabeth Ann (R.N.)</b> Instructor, Nursing A.A.S., Philadelphia Community College B.S., Spring Garden College M.S.N., Gwynedd-Mercy College	<b>1995</b>
<b>Shariat, Sholeh</b> Instructor, Mathematics B.E., M.S. Youngstown State University M.S., University of Cincinnati	<b>1998</b>	<b>Stagg, Nancy J.</b> Secretary, Life Skills A.A., Gaston College	<b>1994</b>
<b>Shellman, Donna Sue (C.M.A., C.P.C.)</b> Instructor, Office Systems Technology A.A.S., Gaston College B.A., Belmont Abbey College	<b>1998</b>	<b>Standley, Evelyn M.</b> Administrative Assistant, Board of Trustees & Development A.A.S., Gaston College	<b>1985</b>
<b>Shellman, W. Mark</b> Chair, Information Technologies B.S., North Carolina State University M.S., Barry University	<b>1984</b>		

<b>Stanley, Ann</b> Security Officer-Lincoln Campus	1996	<b>Weaver, Paulette H.</b> Lead Trainer, Basic Skills A.A., Gaston College B.A., Sacred Heart College M.S., NCA&T State University	1978
<b>Starr, Sharon S. (R.N.)</b> Instructor, Nursing A.S.N., Gardner-Webb University B.S.N., UNC-Chapel Hill M.S.N., UNC-Greensboro	1991	<b>Weisgerber, Amy O.</b> Administrative Assistant, Health Sciences A.A.S., Gaston College	1988
<b>Stokes, Steven L.</b> Chair, Machining Technology B.S., Southern Illinois University M.S., Northern Illinois University	1990	<b>Welch, Philip B., Jr.</b> Director RESTC/Fire Protection & Rescue Training A.A.S., Gaston College	1990
<b>Stroup, Edward R.</b> Grounds Technician	1994	<b>Welder, Rosalind</b> Dean, Lincoln Campus B.S., M.A., Appalachian State University	1998
<b>Stroup, Joyce E.</b> Instructor, English A.A., Gaston College B.A., M.Ed., UNC-Charlotte	1978	<b>Whisenant, David H.</b> Instructor, Business Administration B.S., M.A., Ed.S., Appalachian State University	1980
<b>Sturmer, William H.</b> Controller A.A., Miami Dade Community College B.B.A., Florida Atlantic University	1996	<b>Whisnant, Terri</b> Payroll Assistant, Accounts Receivable A.A.S., Gaston College	1999
<b>Sumner, Nancy C.</b> Dean, Health and Business B.S.N., UNC-Chapel Hill M.S.N., UNC-Greensboro	1997	<b>Whitesides, Linda H.</b> Assistant Director, Bookstore A.A.S., Gaston College	1989
<b>Thackston, Judith M. (R.N.)</b> Instructor, Nursing B.S.N., M.S.N., UNC-Charlotte	1984	<b>Whitley, Roger W.</b> Director, Criminal Justice Academy/BLET B.S., Mars Hill College	1979
<b>Thornburg, Chris</b> Secretary, Cooperative Education & Student Employment, (Part-Time)	1999	<b>Williams, Brian</b> Information Access Librarian B.A., University of Illinois at Chicago J.D., Wayne State University School of Law M.S.L.S., Wayne State University School of Library Information Science	1998
<b>Todd, Patricia</b> Custodian	1996	<b>Williams, Sandra</b> Adjunct Librarian, (Part-Time) B.A., Wake Forest University M.R.E., SWBTS M.L.S., UNC-Greensboro	1999
<b>Trexler, Sara</b> Manager, WSGE Radio B.A., College of William & Mary	2000	<b>Wilson, Cathy</b> Assistant PC Specialist A.A.S., Gaston College	2000
<b>Trueman, Margaret S. (R.N.)</b> Instructor, Nursing B.S., Indiana University of Pennsylvania B.S.N., Queens College M.S.N., UNC-Charlotte	1991	<b>Wilson, Charles M.</b> Director, Bookstore/Food Services B.S., Johnson C. Smith University	1996
<b>Turner, Margaret</b> Cashier, Business Office, Lincoln Campus	2001	<b>Wilson, Tim</b> Director, Technology Services A.A., St. Petersburg Jr. College B.S., M.A., Western Carolina University C.A.S., UNC-Charlotte	1999
<b>Wall-Hill, Sheila, N.</b> Laboratory Staff Associate, Science Dept. B.S., Johnson C. Smith University	1992	<b>Wilson-Myers, Shineet</b> Instructor, Early Childhood Development Center Diploma, Atlanta Area Technical	2000
<b>Walters, Jimmy W.</b> Grounds Technician	1975	<b>Wingfield, Deborah</b> Secretary/Specialist, Financial Aid A.A.S., Gaston College	1996
<b>Ward, Diane</b> Computer Specialist, Technology Services A.A., Gaston College	1997	<b>Wood, Bobby G.</b> Chair, Welding Catawba Valley Technical Institute Gaston College	1975
<b>Warren, C. James</b> Instructor, Information Technologies B.S., Gardner-Webb University	1985		
<b>Wash, Allen G. (C.P.A.)</b> Chair, Accounting B.B.A., Augusta State University M.B.A., M.Acc, University of South Carolina	1977		



<b>Wray, Charles R.</b> Director, Purchasing A.A., Gaston College B.S., Appalachian State University	<b>1996</b>	<b>Wyont, Wanda</b> Chair, Early Childhood Education B.S., Thomas Edison State College M.A., Lenoir Rhyne College	<b>1997</b>
<b>Wray, Michelle</b> Director, Enrollment Management/Admissions B.A., UNC-Chapel Hill M.A., Appalachian State University	<b>1999</b>	<b>Yates, Judy W.</b> Counselor A.A., A.A.S., Gaston College B.A., Sacred Heart College M.H.D.L., UNC-Charlotte	<b>1980</b>
<b>Wyont, Kimberly</b> Assistant to the Vice President for Academic Affairs B.S., High Point University	<b>1999</b>		

## FACULTY EMERITUS

**Berry, Benedict**  
Philosophy

**Lewandowski, Joseph**  
Psychology

**Jones, Dean**  
Religion

**Lunsford, Paul**  
Physics and Mathematics

**Keck, Russell A.**  
Industrial Engineering  
Technology

**McAteer, Porter**  
Industrial Engineering  
Technology and Math

**Killian, Don**  
Social Science

**Reavis, Lester**  
Mathematics

**Leong, Vincent**  
Mathematics

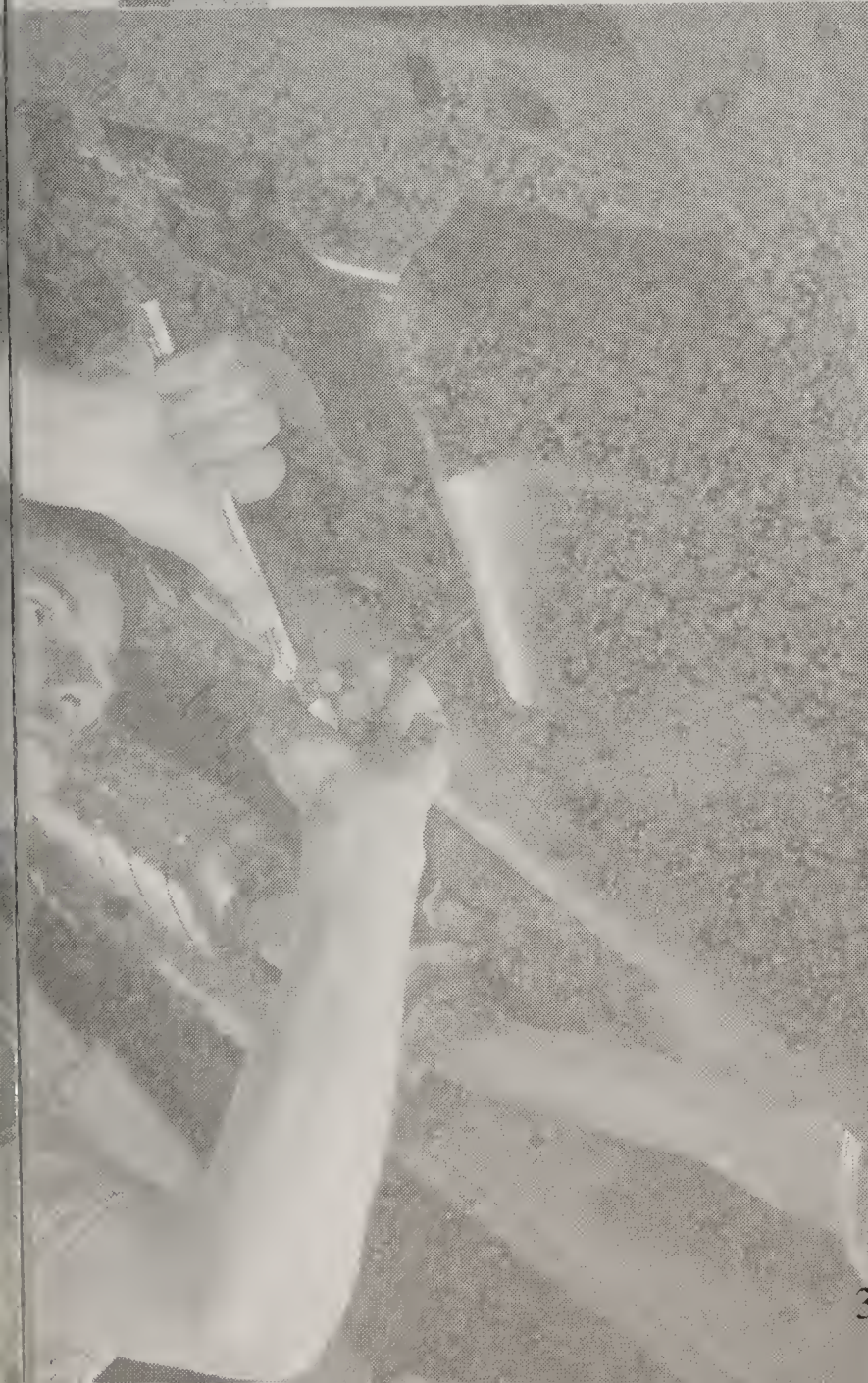
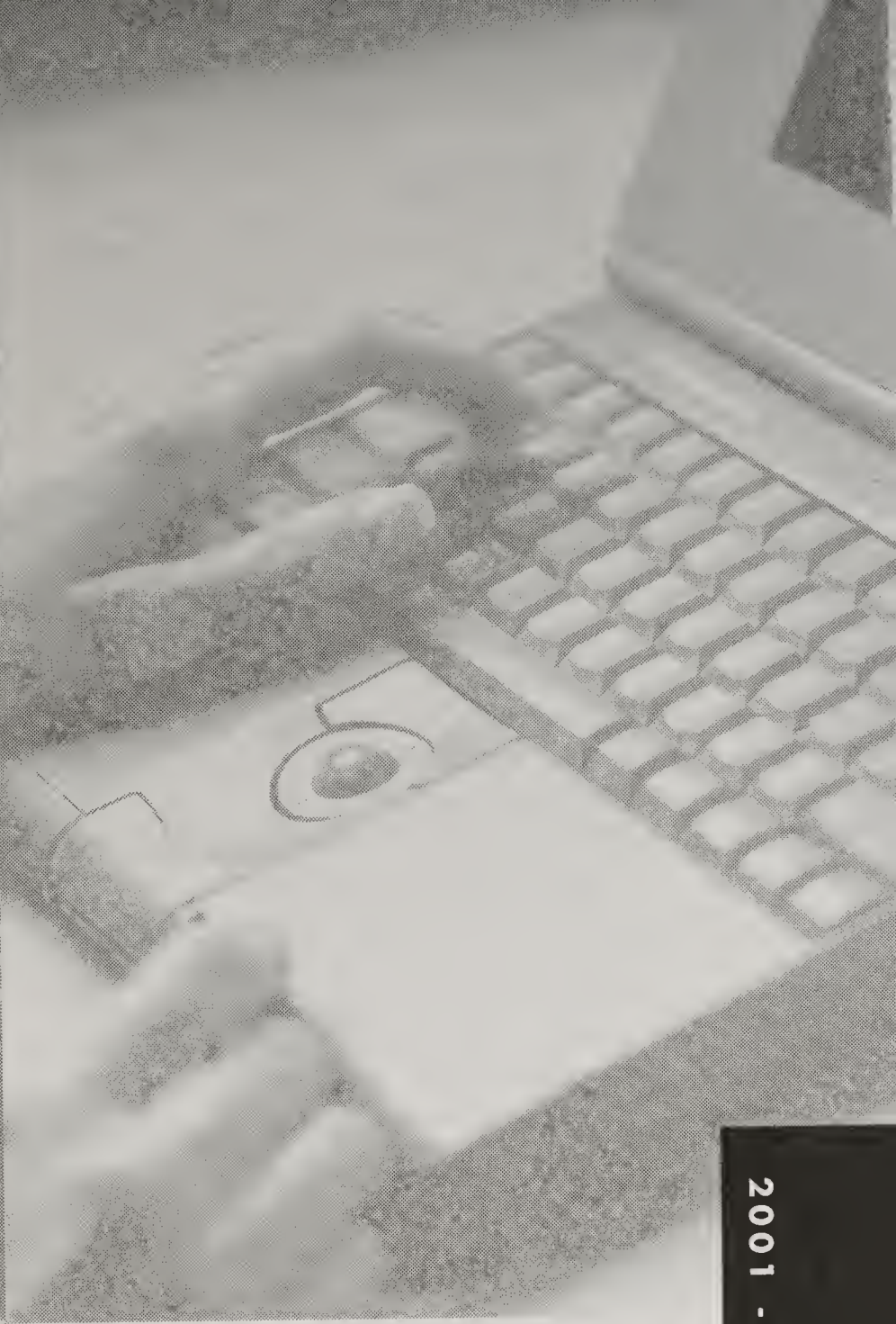
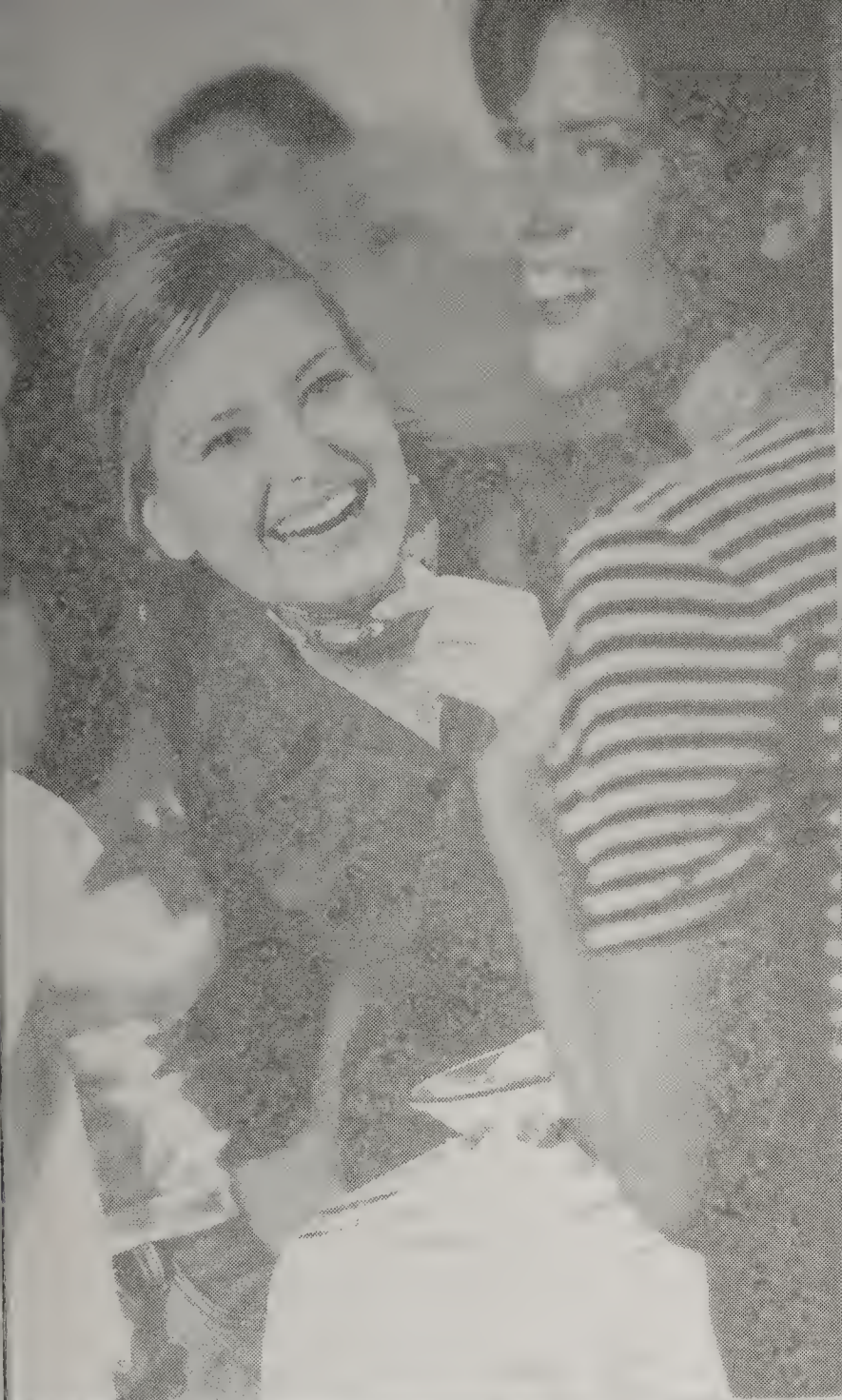
**Simmons, Lee S.**  
Accounting

**Trammel, Bruce J.**  
Accounting



**Gaston College**  
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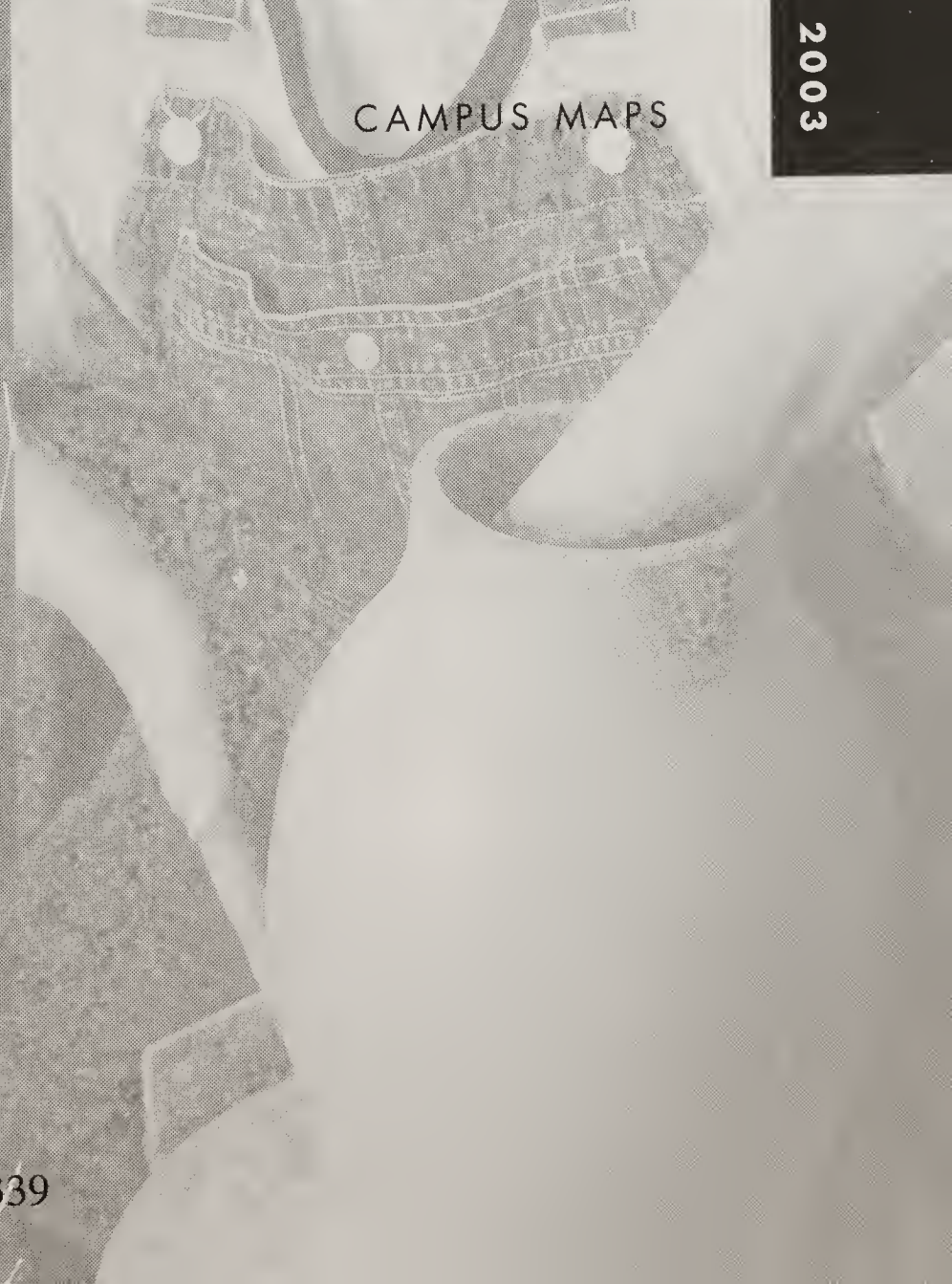
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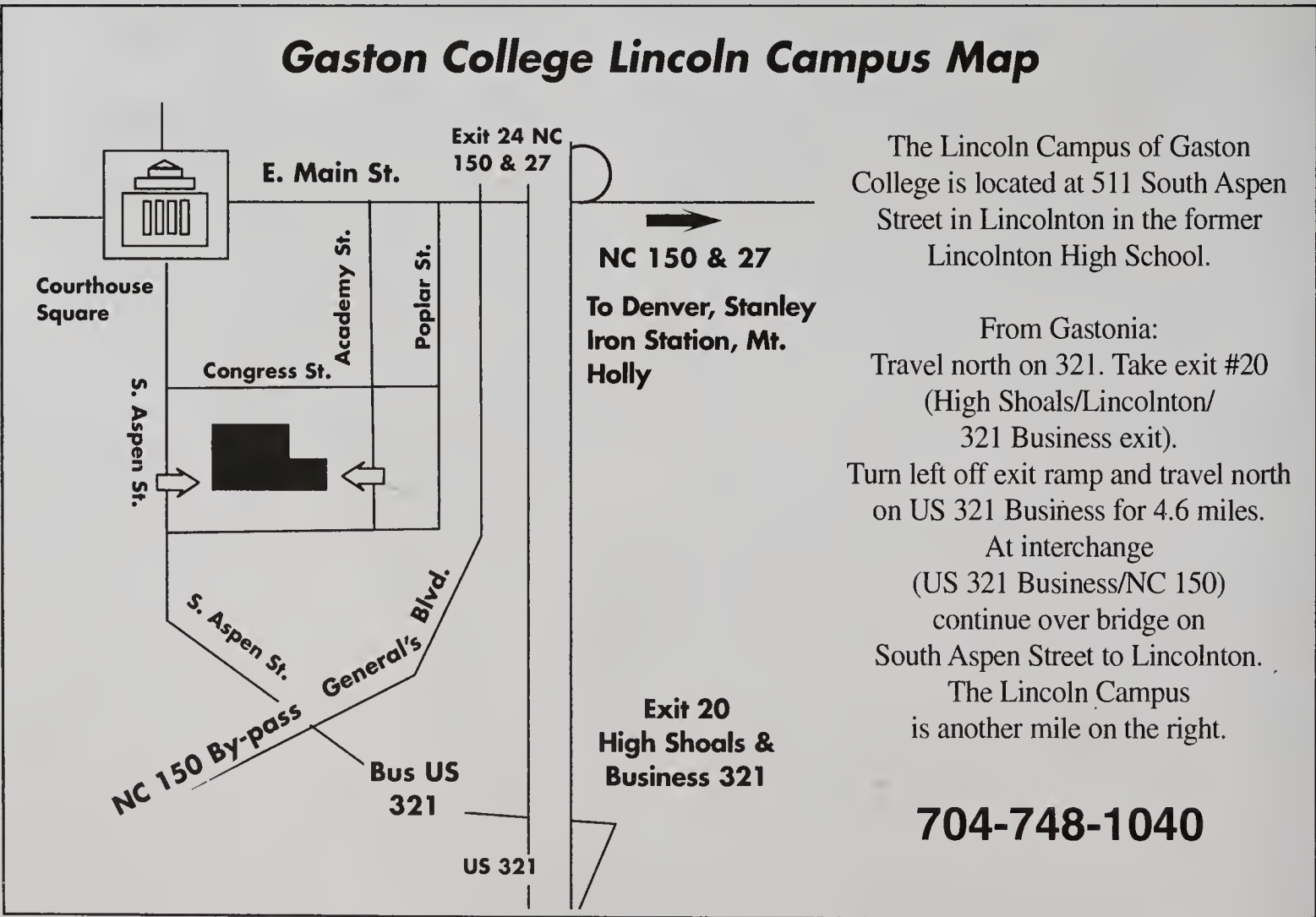


2001 - 2003

CAMPUS MAPS



# CAMPUS MAPS







2001 - 2003

## IMPORTANT PHONE NUMBERS





# IMPORTANT PHONE NUMBERS:

Lincoln Campus . . . . .704-748-1040

Dallas Campus . . . . .704-922-6200

Admissions . . . . .704-922-6214

Bookstore . . . . .704-922-6428

Business Office . . . . .704-922-6410

Counseling . . . . .704-922-6220

Cooperative Education . . . . .704-922-6212 or 6247

Financial Aid . . . . .704-922-6227

Student Records/Registrar . . . . .704-922-6232

## Division Offices

Business . . . . .704-922-6263

Engineering Technology . . . . .704-922-6296

Health Sciences . . . . .704-922-6379

Industrial Technology . . . . .704-922-6381

Liberal Arts & Sciences . . . . .704-922-6311

Financial Aid . . . . .704-922-6226

## CONTINUING EDUCATION

Office of the Dean . . . . .704-922-6476

## Community Education

Dallas Campus Classes . . . . .704-922-6250 or 6251

Dallas Campus Traffic School . . . . .704-922-6353

Lincoln Campus Classes/Traffic School . . . .704-748-1057

Computer Training Institute . . . . .704-922-6521

Corporate Education . . . . .704-922-6447

Criminal Justice Academy . . . . .704-922-6241

Emergency Medical Services . . . . .704-922-6249

Fire and Rescue Training . . . . .704-922-6257

## Life Skills

Dallas Campus . . . . .704-922-6545

Lincoln Campus . . . . .704-748-1045

Small Business Center . . . . .704-922-6353





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ACADEMIC CATALOG



**Gaston College**  
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[www.gaston.cc.nc.us](http://www.gaston.cc.nc.us)